



NC DOT Engineering Content Management

Preconstruction Project Sites

Ellen Dickson



Agenda

- **New Preconstruction Project Sites**
- **What Is Changing and Why**
- **Preconstruction Project Site Model**
- **Where We Are Today**
- **Future Direction**
- **How you can benefit**



Announcing: NCDOT Preconstruction Project Sites

To facilitate project delivery through enhanced collaboration between NCDOT and its partners, online Preconstruction Project Sites are being established for every transportation project.

Each Preconstruction Project Site will allow:

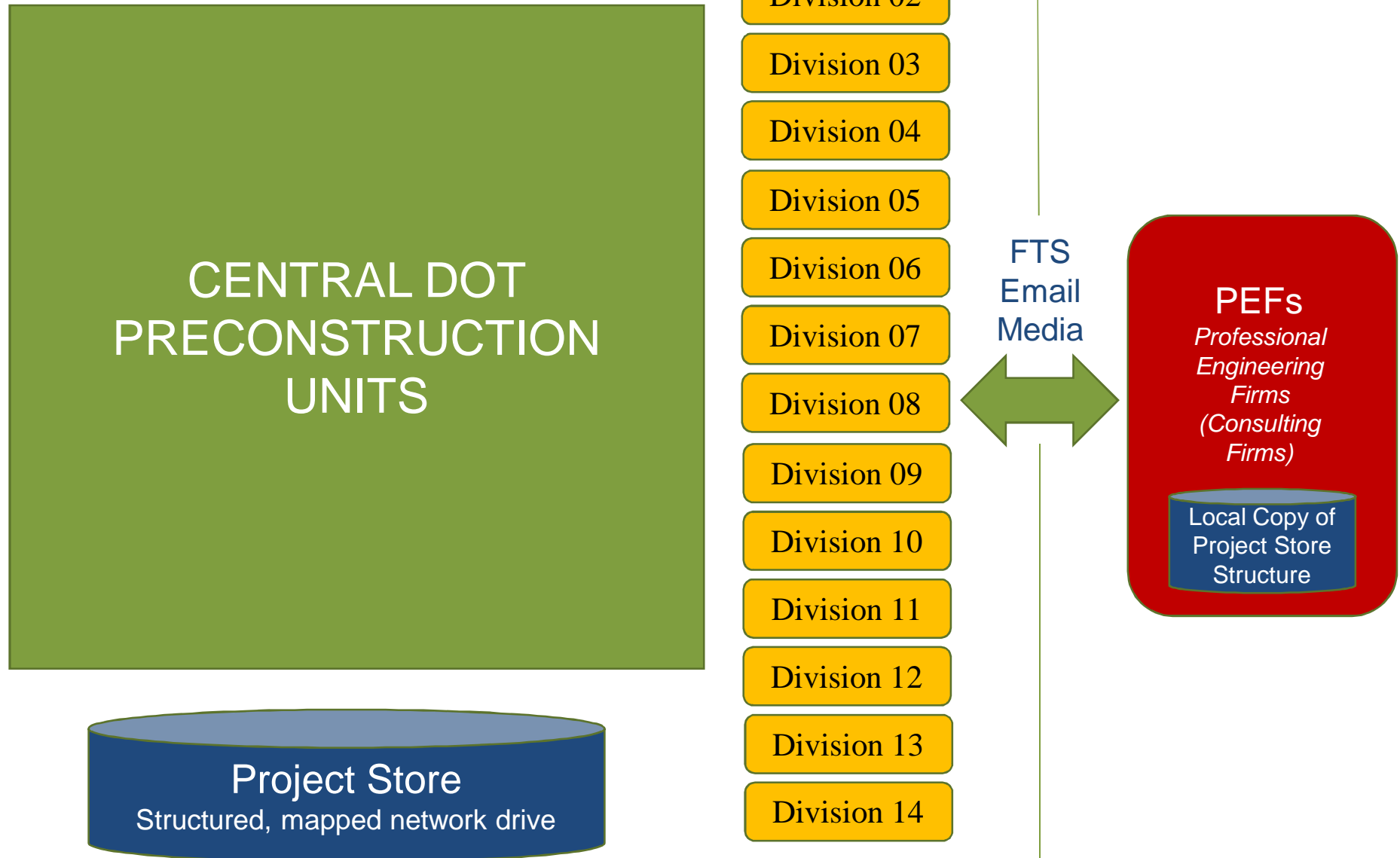
- Registered users (internal and external) to submit, review, and modify project files based on their roles;
- A consistent way to organize project files statewide;
- Rapid and comprehensive searching of all project files;
- Transfer of large files;
- Versioning of project documents; and
- Access to project files from mobile devices.

The initial rollout includes support for the planning portions of the project; support for additional disciplines & project phases will follow.

Division	Project Number
Division 01	14SP.20221.1
Division 02	14SP.20221.2
Division 03	14SP.20451.1
Division 04	17BP.14.R.130
Division 05	17BP.14.R.141
Division 06	17BP.14.R.143 Bridge No 64
Division 07	17BP.14.R.62
Division 08	2016CPT.14.07
	2017CPT.14.06
	51213.012 Cherokee Rest Area
	A-0009B



Previous Operating Model



Divisions responsible for
< 5% of STIP projects

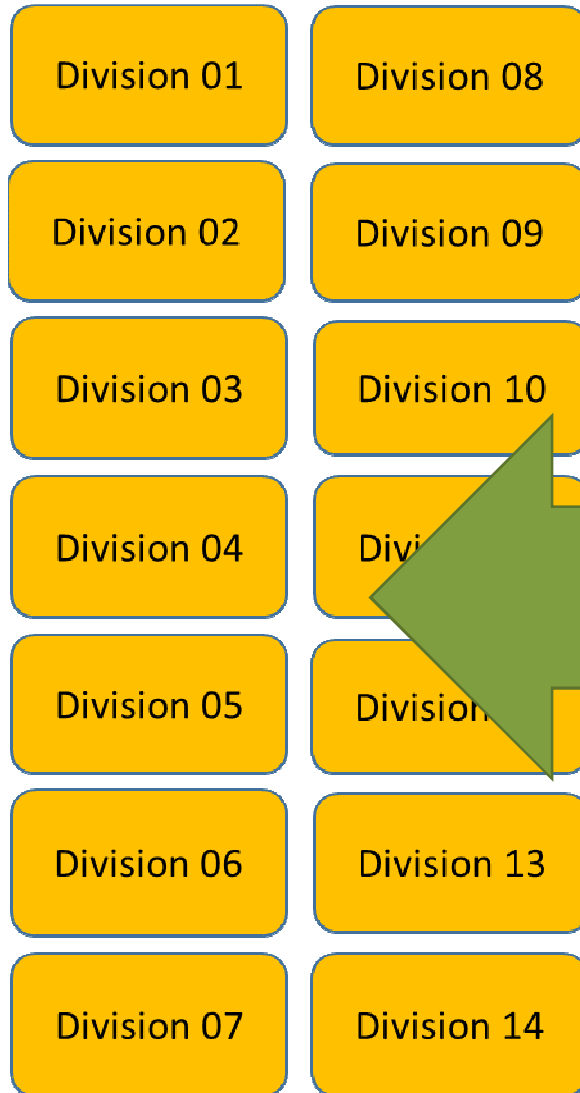
New Operating Model

Decrease in central staff
Increase in outsourcing
Increase in division authority

CENTRAL DOT
PRECONSTRUCTION
UNITS

Project Store
Structured, mapped
network drive

Div Proj



FTS
Email
Media

PEFs
*Professional
Engineering
Firms
(Consulting
Firms)*

Local Copies of
Project Store
Structure

Consulting firms now have a
much larger role.

5 Divisions now responsible for more projects and more complexity than ever before: **65%** of STIP projects (~20% in \$)

Goals to Support Project Delivery

Accessibility goals:

- Appropriate access by all involved user groups: DOT users (central and division), Consultants (PEFs), and External partners
- Access from mobile devices

Functionality goals:

- Easy & intuitive to use, fits business processes & terminology
- Handles large files
- Tools tailored for CADD design
- Automation & standardization
- Everyone works with same reference copy
- Versioning
- Backup & recovery, retention management

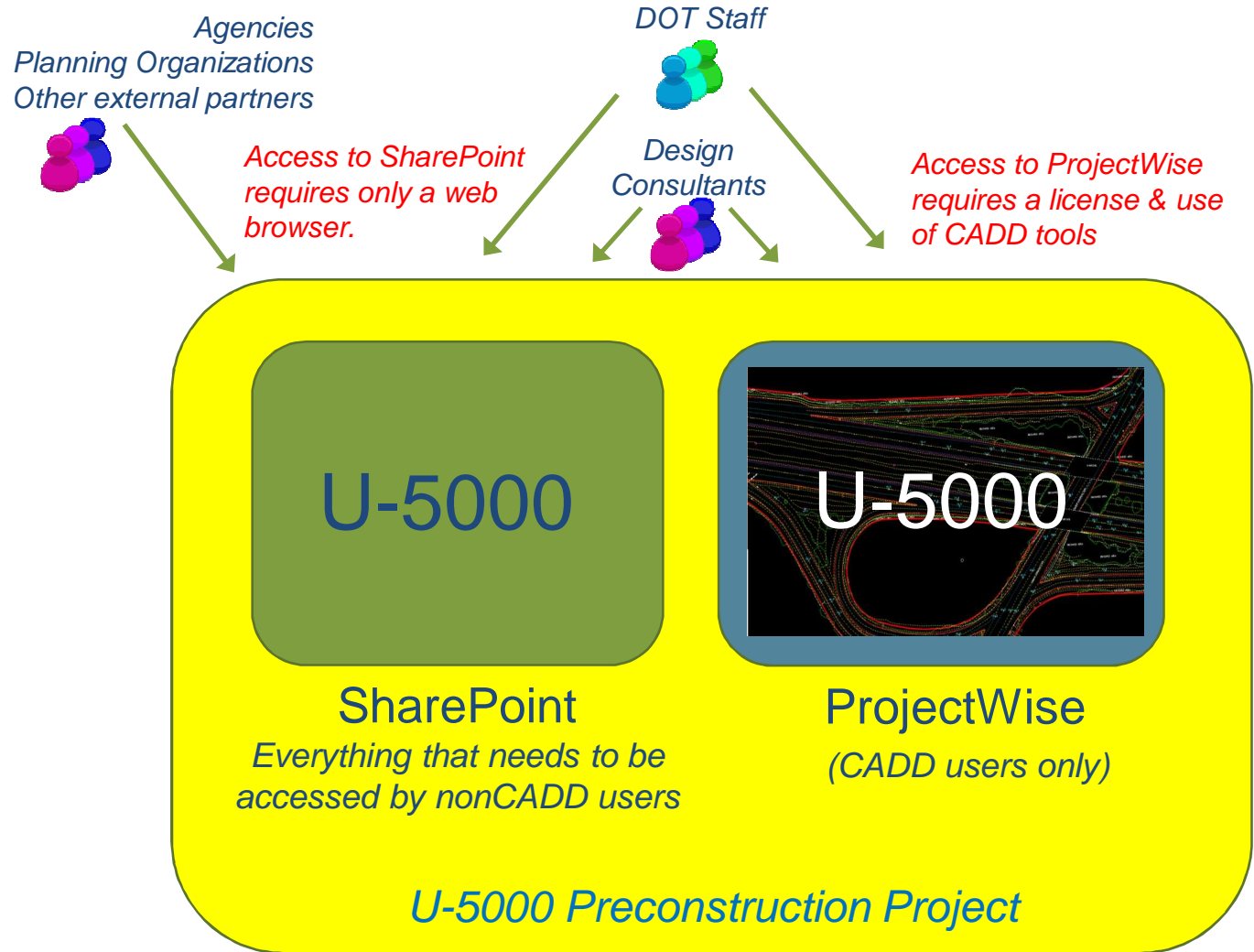
General Content Management goals:

- Organized online storage and useful tools
- Ability to navigate to content by discipline
- Ability to search for content & quickly locate deliverables



Preconstruction project site model

one site per transportation project



First Step: SharePoint

The screenshot shows the top navigation bar with 'Connect NCDOT BUSINESS PARTNER RESOURCES' and tabs for 'Doing Business', 'Bidding & Letting', 'Projects', and 'Resources'. Below this is the project identifier 'A-0009C' and the title 'Precon Project Site'. A breadcrumb trail shows 'Division 14' and 'A-0009C'. The main content area is divided into two columns. The left column, titled 'Project Site', contains links for 'Preconstruction Home', 'Grant Consulting Firm Access', 'Discipline Specific Links', and 'Project Commitments'. The right column is divided into 'From DOT' (Human Environment, Natural Environment, Project Development) and 'To DOT'.

Sept 2016: Initial rollout on SharePoint

- > 1000 sites created so far, one per project
- Each site is built from a common **template**

Initial rollout **Benefits:**

- Consulting firms can *contribute* to some libraries based on assigned role and *read* the rest
- DOT & Consultants can store, share and exchange files in a persistent place:
 - Files are not deleted *unlike with FTS*
 - Multiple groups can access same set of files
 - Initial set of disciplines can be completely moved to SharePoint instead of using Project Store
 - Store ETRACS deliverables here & provide link
- Quick Reference files, FAQ, useful links

Initial rollout **Limitations:**

- Other disciplines must share and exchange files or sets of files in the **From DOT** and **To DOT** libraries
- No CADD support yet

Next Steps on SharePoint

By January 2017:

Added Tuesday 11/8

- **Precon Announcements** on Preconstruction Home page, to inform users of new features
- **Project Development Collaboration** library
collaborate with resource agencies & planning organizations (MPOs, RPOs) on environmental documents etc.
- **DOT Restricted** library
Restricted cultural resources, protected species, plans by others (visible to DOT only)
NOTE: Info that should not be shared with a broad audience, such as Man day estimates, engineering ests., consultant feedback – should not be put in these sites
- **Project Contacts** list
Keep track of who is working on the project & their contact info
- **New User Survey**

Incrementally roll out improvements:

- **More document libraries**
- **More useful tools**
- **Updates to Help information**



Prioritize & enhance model based on User Group Feedback:

To volunteer for the **Preconstruction User Group**,
contact Ellen Dickson ehdickson@ncdot.gov

- Monthly meeting – in person in Raleigh or join by phone



Preconstruction ▸ Preconstruction

Home ▸ Preconstruction

Home

SharePoint Help

Discipline Specific Links

Site Requests

Consulting Firm Access Requests

Preconstruction Help

Preconstruction Search

Reports

Survey

Find a Site

Division 01	14SP.20221.1
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Division 10	51213.012 Cherokee Rest Area
Division 11	A-0009B
Division 12	A-0009C
Division 13	A-0011C
Division 14	B-3186
	B-5408
	B-5541
	B-5896
	B-5897
	B-5898

Precon Announcements

Title

[More flexibility in naming project sites](#)

When requesting a new preconstruction project site, DOT users may now provide a short (20 character) description that will be added to the end of the TIP or WBS to make the site name. This allows you to set up separate sites for projects that share a WBS and enables a more user-friendly site name than a WBS alone provides. Use the "WBS Extension" field in the Site Requests list to make your site names more usable.

*Future Direction
(subject to change)*

B-5501 ▶ **B-5501**

Precon Project Site

🏠 ▶ Division 01 ▶ B-5501

Project Site

- [Preconstruction Home](#)
- [Grant Consulting Firm Access](#)
- [Discipline Specific Links](#)
- [Project Commitments](#)

- [Key Documents](#)
- [Project Calendar](#)
- [Project Contacts](#)
- [Project Information](#)
- [Project Site Access Summary](#)
- [Project Structures](#)

Future Direction (subject to change)

GENERAL

- [General Announcements](#)
- [DOT Restricted](#)
- [Project Input – Data, Recommendations, and Other Review Comments](#)

DISCIPLINES

- [Geotechnical](#)
- [Human Environment](#)
- [Hydraulics](#)
- [Intelligent Traffic Systems and Signals](#)
- [Location, Surveys, and Photogrammetry](#)
- [Natural Environment](#)
- [Pavement and Resurfacing](#)
- [Project Development](#)
- [Right of Way](#)
- [Roadside Environmental](#)
- [Roadway](#)
- [Signing and Delineation](#)
- [Structures](#)
- [Utilities Engineering](#)
- [Work Zone Traffic Control](#)

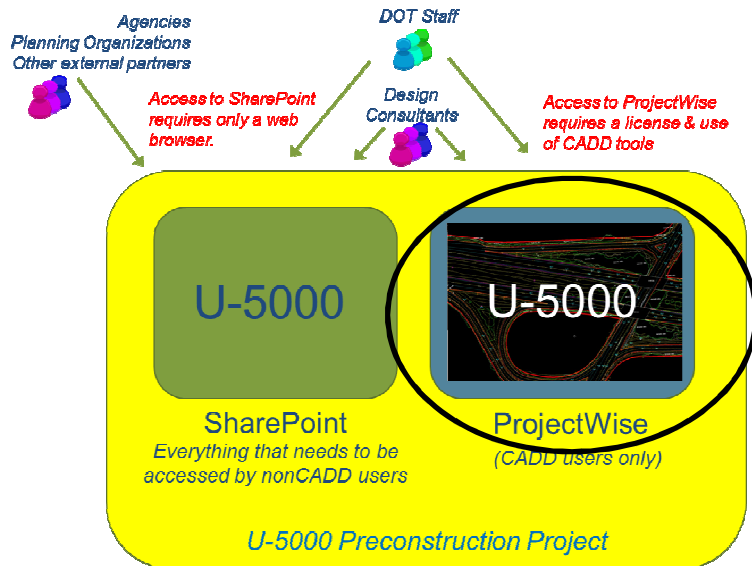
EXTERNAL COLLABORATION

- [Project Development Collaboration](#)
- [Utilities Coordination](#)

PLANS & PROVISIONS

- [Key Milestone Plan Sets](#)
- [Final Provisions](#)
- [Assembly for Let](#)

Bentley's ProjectWise



SharePoint does not understand CADD internal references.

- Files (or .zip files) can be stored there, but designers need more

NCDOT plans to use ProjectWise for storing and sharing CADD based content.

NCDOT is in the process of procuring

- Use of Bentley's cloud-based managed ProjectWise Design Integration environment
- Use of additional service offerings:
 - ProjectWise Project Sharing Services
 - ProjectWise Deliverables Management
- Services engagement with Bentley to help us get started
- *Exact configuration of applications & tools for CADD still under development*



How you can benefit!

- Online access to project repositories
- Easy way to store/transfer large files
- Access from mobile devices*
- Simpler standard project structure – less complex than today’s TIP folders
- Consistent structure from project to project
- More libraries and features coming soon!

What you can do to get started

- Start using the project sites!
- Request new sites be set up for projects that don’t yet have sites
 - Use the “WBS Extension” field to add a word or phrase to the site name
- Grant access to projects for the consulting firms you’re working with
 - Subs can be granted access as well
- Consider participating in the Preconstruction User Group or otherwise provide constructive feedback

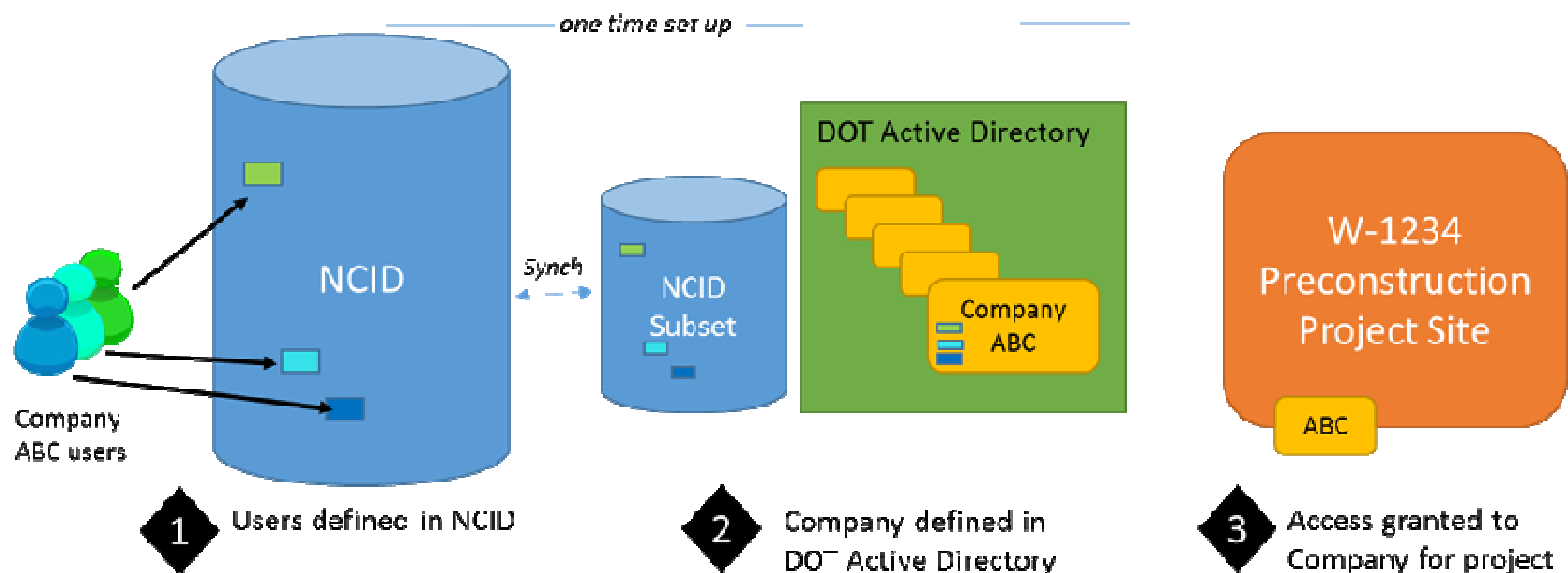
* Windows & IOS devices. Android users must use an app, such as SharePlus.



Backup Slides



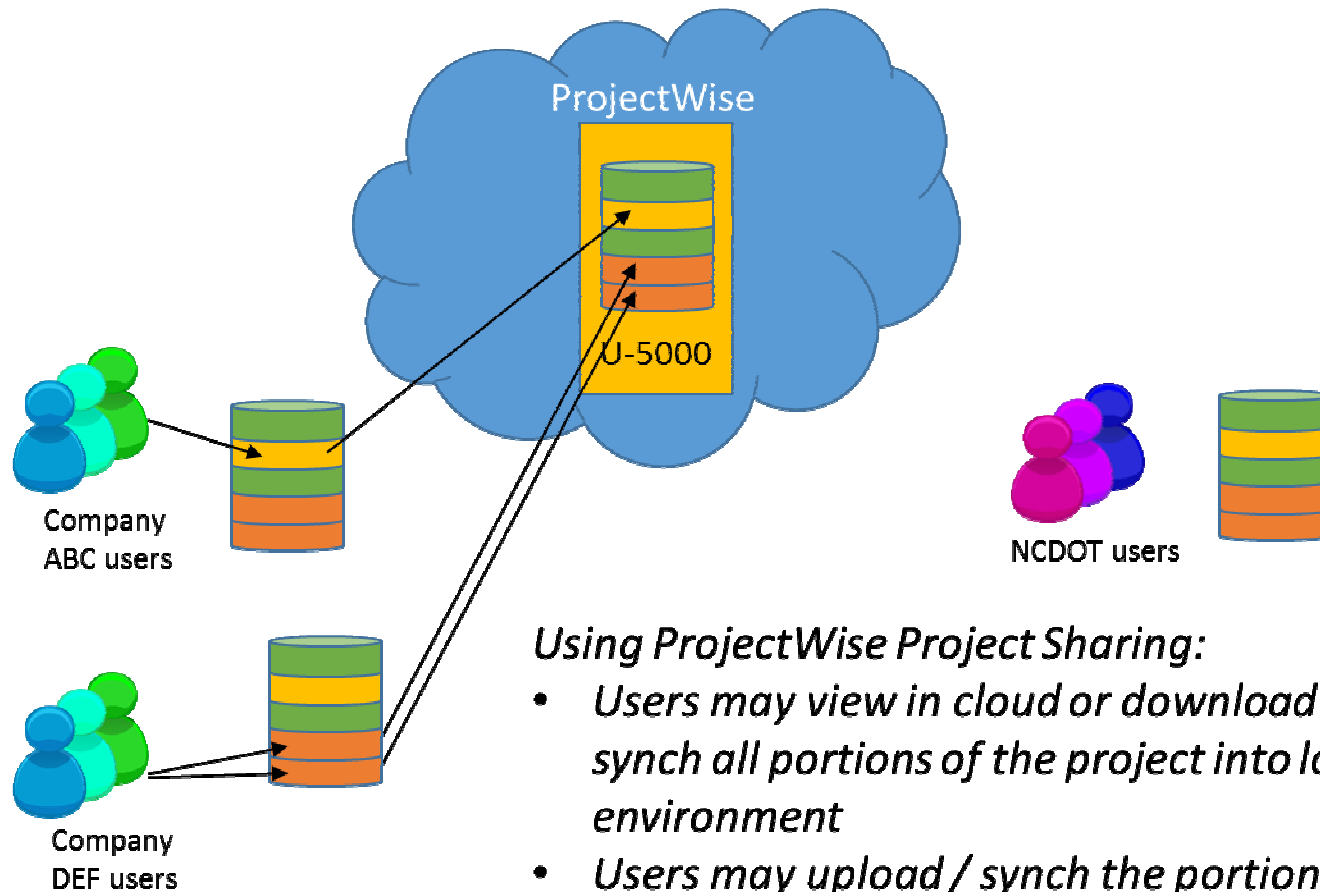
Consulting Firm Access



1. Get an NCID at no cost from <https://ncid.nc.gov> . Login & update password.
2. Contact Diana Feigin dfeigin@ncdot.gov to set up (or update) company group, providing primary & backup user administrator name and list of users to be included: names, NCIDs, email addresses
3. DOT users on project grant role-based access to consulting firm as a group



ProjectWise Project Sharing Services



Using ProjectWise Project Sharing:

- Users may view in cloud or download / synch all portions of the project into local environment***
- Users may upload / synch the portions of the project they have write access to***