July 5th, 2023

We have finalized the computer spec document and got a thumbs up from IT to distribute, below is the official copy.

We wanted to make note there are definitely pros and cons to both solutions and the end user should select carefully, as this will be their solution until computers are replaced again.

ProjectWise can be accessed directly from the internet without VPN. But if your preference is to access through the VPN your initial download will be significantly slowed since split tunneling was removed. (Though, once data is cached performance will improve.) We believe this is the biggest concern with the laptop solution.

End users should also consider personal internet speeds when deciding between laptop and chromebook solutions.

Central Office IT will be reaching out to each District IT Office to disseminate information and collect the orders. CO CADD has no personal preference in what end users select as we can support our products on the laptop and desktop.

Please let us know if anyone has any questions. Thanks!

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# **New Computers 2023 Quick Guide**

## **Options:**

Z230 Replacement Option 1:

Dell Precision 3581 Laptop Intel® Core™ i9-12900 2.50 GHz 64GB RAM nVidia RTX2000 GPU 1TB SSD

Screen Size: 15.6" Full HD (1920x1080), 16:9

aspect ratio Weight: ≈ 3.95 lbs. Z230 Replacement Option 2:

Lenovo P360 Desktop Intel® Core™ i7-12700 2.1 GHz 64GB RAM Expandable nVidia RTX3070 Ti

1TB SSD

+ Chromebook

Screen Size: 13.5", 3:2 aspect ratio

Weight: 2.87 lbs.

#### **Considerations:**

The Office of CADD & Mapping Services tested both performance and user experience of these devices. While this may come down to personal preference there are some things you should take into consideration before deciding on the technology that will work best for your needs.

## General Consideration(s)

The Dell Teams monitors will continue to be the standard issued monitor and will act as the docking station for both the Laptop and Chromebook. (Separate docking stations will not be purchased by IT as part of this upgrade project.)

### **Laptop**

- Heavier than Chromebook
- Must use VPN to access network drives when working from home, which is very slow for large files.
- ProjectWise/ORD is a cloud-based solution, meaning it can be accessed directly over a network connection, without the need to access the VPN.
- If you have a document open from PW and lose internet connection, you can keep working.
- Geopak is un-usable over VPN, but we are addressing Geopak access and use in our decommissioning plan so that you can make a better long-term technology decision.
- Performance degradation if Dell monitor is used to charge laptop (recommended to charge with supplied power adapter).

## Desktop/Chromebook

- Must use Citrix workspace to remote into desktop when working from home. We experienced the
  following issues during testing that would prohibit you from being able to work from home with this set
  up:
  - The desktop in the office losing power/being turned off, or if it blue screens.
  - o If you have issues logging into Citrix workspace, or it's down.
- Chromebook itself will not have any programs installed on it, therefore it can't be used as a standalone
  device.
- Chromebook keyboard is missing several keys (can be resolved by using an external keyboard)
  - o No num pad, windows key, delete key, function keys, home key, end key...
  - The setting that treats top-row keys to work as functions keys needs to be set even when using an external keyboard with built in function keys.
- Chromebook only has one USB A port.
- Chromebooks cannot connect to OhioDOT equipment wirelessly (airmedia...)
- ALT + down doesn't work on Chromebook (even when using external keyboard), this is used in ORD.
- Common shortcut key combinations don't work on Chromebook.
- We experienced inconsistencies in user experience when using Microsoft Teams from Chromebook.
- Camtasia Screen recording does not work properly from Chromebook-Citrix session.