



MnDOT ArcGIS Portal Guidance

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Background

What is Portal?

Portal is a component of ESRI's ArcGIS Enterprise that provides a diverse set of users with access to the MnDOT enterprise geographic information system. This allows for greater security through Active Directory (AD) identity management, and in general greater resources in terms of data storage, than are available in the ArcGIS Online (AGOL) Cloud offering.

Portal users can:

1. Create, save, and share web maps
2. Create and host web mapping apps
3. Create, save, and share GIS data and metadata
4. Search for GIS content within MnDOT
5. Create groups to share GIS information with colleagues
6. Share links to GIS applications
7. Share map and layer packages to use in ArcGIS Desktop
8. Help further the community of MnDOT GIS users with a technology of communication, collaboration, and creativity.

Architecture

The implementation of Portal at MnDOT includes three environments: Development, Test, and Production. Each environment includes a deployment of ArcGIS Enterprise that consists of Web Adaptors, Portal for ArcGIS, ArcGIS Data Store, and ArcGIS Server. Requests from Portal users come through F5 which acts as a reverse proxy. Web Adaptors forward requests to the server machines in the deployment. Portal is the website frontend to ArcGIS Enterprise. The ArcGIS Data Store is for storing hosted feature layer data and is managed by ArcGIS Server. ArcGIS Server is federated with Portal and along with a hosting server allows users to publish content through Portal.

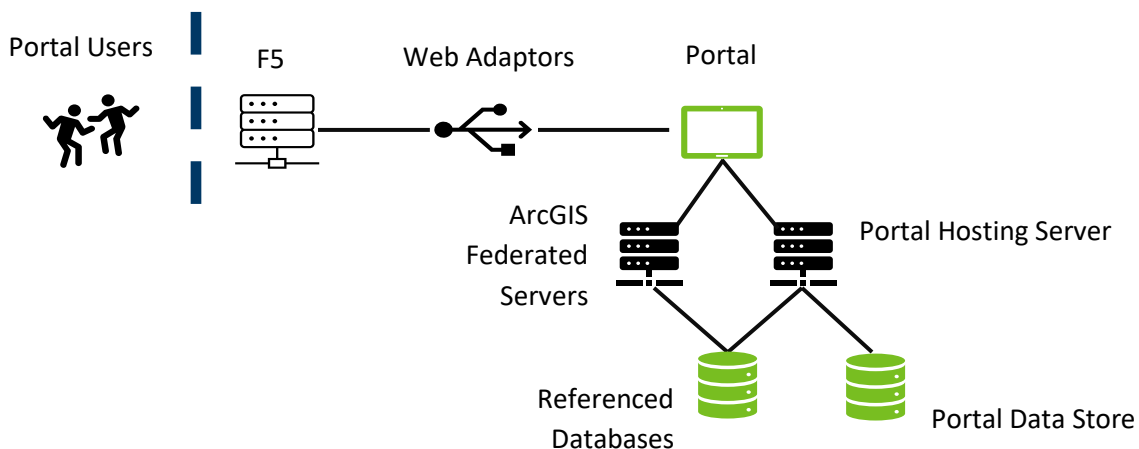


Figure 1 - Deployment of ArcGIS Enterprise

Security and productivity for all users are valued. Portal will allow for access to authoritative information and applications at MnDOT. It is understood that certain workflows such as self-serve mapping and analysis require the ability to create content in the Production environment. Rather than using a concept of least privileges to guide access, members will be granted access to Portal in Production with pre-cautionary warnings, pulling back if vigilance over the resources indicate it is needed. That said, the Development and Test environments should be utilized for application development and testing. This helps keep the Production Portal environment free of content that has not been tested and not ready for use by the organization.

ArcGIS Enterprise Portal vs. ArcGIS Online - What are the differences?

ArcGIS Enterprise Portal and AGOL are both implementations of web GIS with similar functionality but have notable differences.

Both platforms allow users to create content and share maps and applications. ArcGIS Enterprise runs on infrastructure owned and operated by MNIT. AGOL runs on ESRI’s managed cloud infrastructure. The AGOL website, resources (credits), and functionality are hosted by ESRI. Credits are how AGOL associates a cost with certain features of the platform. Portal does not include credits since it runs on MNIT infrastructure. Users access ArcGIS Enterprise through Portal by using their Active Directory (AD) username and password. **ArcGIS Online usernames and passwords will not work in Portal.** AGOL at MnDOT is accessed with a separate username and password specific to ESRI and is not tied to AD. Access to online ESRI provided training will still be done using AGOL credentials.

	ArcGIS Online	Portal
Hosting Infrastructure	ESRI Managed Cloud Infrastructure	MNIT Managed Infrastructure
User Access	AGOL Specific Username and Password	Windows AD Username and Password
Usage Costs	Consumes ESRI ArcGIS Online Credits	No Credits
Training Access	AGOL account accesses ESRI training	Portal account does not access ESRI training

Table 1 – Comparison of ArcGIS Online and Portal

Portal Membership

New User Request Process

Users may request membership to Portal through MNIT Enterprise GIS staff by submitting an IT ticket or by contacting a MnDOT GIS Coordinator. GIS Coordinator contact information can be found on iHUB at GIS support contact information at <https://ihub.dot.state.mn.us/gis/aboutgis.html>

User access requests to Portal may be granted for all three environments (Development, Test, and Production) depending on needs.

- Development - <https://gisportald.dot.state.mn.us/egis65/home/>
 - Workspace for developers and publishers to use as a sandbox for developing new content, workflows, and new capabilities without impacting a larger Portal userbase.
- Test - <https://webgist.dot.state.mn.us/egis65/home/>
 - The test Portal environment allows for developers and publishers to test changes prior to deploying to Production.
- Production - <https://webgis.dot.state.mn.us/egis65/home/>
 - The live Portal environment for end users to share content, maps, and applications. Changes to software, applications, and Portal configurations should not be made to Production without being vetted in the Test environment.

Restrictions

Review the account types and roles described in the next sections prior to requesting membership to Portal.

To access Portal, users must have an Active Directory (AD) account. The username and password used for Windows authentication is how users connect to Portal.

Non-MnDOT Employees

Should a contractor require access to Portal they must have an AD account created through the [Access Authority Request Process](#). An example of this would be a contractor needing write access to Portal content. Once the contractor has an AD account established the user still needs to be added as a Portal member. These members should be assigned the MnDOT External Partner role.

Upon completion of the project and prior to removal of the contractor from Portal it is MnDOT's responsibility to reassign ownership of items owned by the contractor to an appropriate MnDOT Portal member or determine if the items are to be deleted. MNIT will not be responsible for retaining content when accounts are removed from Portal.

MnDOT and MNIT Policy

The [Appropriate Use of Electronic Communication and Technology](#) policy applies to Portal accounts.

Prior to deleting content Portal users must determine if the items are records and comply with [Records Management](#) and the MnDOT Retention Schedule.

User Account Types

MnDOT Portal utilizes user account types and roles to ensure members have the right privileges to perform their tasks. There are two user account types available in Portal at MnDOT, Viewers and Creators. These user types dictate the privileges that can be granted to members through associated roles. See Table 2 for the roles available under each user type.

- Viewer Accounts – Viewers can view items shared with them by other Portal members. This user type is for those that **DO NOT** need to create, edit, share, or perform analysis. The only role available under the Viewer account user type is that of MnDOT Viewer.
- Creator Accounts – Creators can view, create, and share content. All other Portal roles are available under the Creator user type.

Each Portal member is assigned a user type when their account is created. If it is not known what user type a user will need then the user will be added as a viewer by default. This can be updated as needed per user request.


User Types	Roles	Privileges
Creator	Administrator	Most  Least
	MNIT Enterprise GIS	
	MnDOT Administrator	
	MnDOT Coordinator	
	MNIT@DOT	
	MnDOT Publisher	
	MnDOT Analyst	
	MnDOT External Partner	
	LRS Event Editor	
Viewer	MnDOT Viewer	

Table 2 - User Types, Roles, Privileges

Roles

As described above, user types dictate the high-level capabilities members can have. Portal roles exist to further define what users can do. Portal at MnDOT includes roles with sets of privileges to assign to Portal members. Privileges are organized with general privileges for members, groups, content, sharing, analysis, and editing. Separate administrative privileges exist for members, groups, content, and portal settings.

Roles are to be reviewed prior to requesting Portal access. If it is not known what role a new user requires then MnDOT Viewer will be assigned by default. If an elevated role is deemed necessary, this can be changed later.

The MnDOT Portal roles and their privileges are displayed in Table 3 and Table 4. Table 3 includes general privileges for each role in Portal. Table 4 only includes administrative privileges granted to elevated roles in the organization.

Administrator

The default Administrator role includes the highest level of privileges available in Portal. This role contains publisher privileges, plus additional capabilities to manage the organization, and administer the Portal deployments. For security, this role is granted to a limited number of MNIT staff supporting Portal.

MNIT Enterprise GIS

The MNIT Enterprise GIS (EGIS) role is granted to MNIT EGIS staff supporting Portal. This role includes many of the same administrative privileges as the Administrator role minus those needed to manage security and infrastructure. MNIT EGIS will manage user licenses, link to enterprise groups, publish server-based services, add data store items, migrate content, and configure Portal settings. This role supports the overall maintenance and health of the MnDOT GIS Portal.

MnDOT Administrator

The MnDOT Administrator role includes many of the same administrative privileges as the Administrator role. It does not include the ability to manage licenses, link to enterprise groups, bulk publish services, and manage Portal settings. See Table 3 and Table 4 for details. This role is intended for 3-4 MnDOT employees supporting Portal. It is expected that these employees will be responsible for sharing public facing content, participating in the review process, curating authoritative data shared with the organization, monitoring the organization for misuse, enforcing content quality, and supporting the overall health of Portal.

MnDOT Coordinator

The MnDOT Coordinator role includes administrative privileges but does not have the ability to share content with the public and manage categories. See Table 3 and Table 4. This role is intended to be granted to MnDOT GIS District Coordinators and functional area/office GIS leads that support many individuals. The MnDOT Coordinator role will have the responsibility of owning and managing Portal groups specific to the district and/or office that the user represents. This will mean content curation and monitoring items shared with their group(s) along with managing membership.

MNIT@DOT

The MNIT@DOT role has administrative privileges and is intended for MNIT at DOT staff supporting Portal business needs. See Table 3 and Table 4 for privileges assigned to this role.

MnDOT Publisher

The MnDOT Publisher role has privileges to create and publish data, groups, maps, and applications. This role cannot publish public facing data, maps, or applications. The MnDOT Publisher role has no administrative privileges.

MnDOT Analyst

The MnDOT Analyst role has privileges to view, create and share data, maps, and applications. This role is limited to sharing content within the organization and cannot create groups. The MnDOT Analyst role has no administrative privileges.

MnDOT External Partner

The MnDOT External Partner role is to be used for non-MnDOT employees (e.g., consultant, city/county staff) participating in a MnDOT endeavor. These users can create content and share with groups they are members of. This role does not have the ability to view content shared with the organization. External user accounts should be removed once the project they participated in has been completed.

LRS Event Editor

The LRS Event Editor role is given to users of LRS event editor applications including Crash, HPMS, and TDA. Users in this role can view portal members, view groups, join groups, view content shared with the organization, and edit features. This role cannot create content or groups. The LRS Event Editor roles has no administrative privileges.

MnDOT Viewer

The MnDOT Viewer role is for users who only need to view Portal content such as maps and applications that have been created by others. These users can join groups and view content shared with the MnDOT Portal. This role will be the default for any new user unless otherwise requested.

General Privileges	Administrator	MNIT EGIS	MnDOT Administrator	MnDOT Coordinator	MNIT@DOT	MnDOT Publisher	MnDOT Analyst	MnDOT External Partner	LRS Event Editor	MnDOT Viewer
Members										
View	X	X	X	X	X	X	X	X	X	X
Groups										
View groups shared with portal	X	X	X	X	X	X	X	X	X	X
Join organizational groups	X	X	X	X	X	X	X	X	X	X
Create, Update, Delete their groups	X	X	X	X	X	X				
Content										
View content shared with organization	X	X	X	X	X	X	X		X	X
Create, update, and delete their content	X	X	X	X	X	X	X	X		
Publish hosted feature layers	X	X	X	X	X	X	X	X		
Publish hosted tile layers	X	X	X	X	X	X				
Publish hosted scene layers	X	X	X	X	X	X				
Publish server-based layers	X	X								
Create feature layers in bulk from a data store	X	X								
Register data stores	X	X								
View location tracks	X	X								
Sharing										
Share with groups	X	X	X	X	X	X	X	X		
Share with portal	X	X	X	X	X					
Share with public	X	X	X							
Make groups visible to portal	X	X	X	X	X	X				
Make groups visible to the public	X	X	X							
Content and Analysis										
Standard Feature Analysis	X	X	X	X	X	X	X			
Features										
Edit	X	X	X	X	X	X	X	X	X	
Edit with full control	X	X	X	X	X					

Table 3 – General privileges for MnDOT GIS Portal Accounts.

Administrative Privileges	Administrator	MNIT EGIS	MnDOT Administrator	MnDOT Coordinator	MNIT @DOT
Members					
View all	X	X	X	X	X
Update	X	X	X	X	X
Delete	X	X	X	X	X
Add	X	X	X	X	X
Disable	X	X	X	X	X
Change roles	X	X	X	X	X
Manage Licenses	X	X			
Groups					
View all	X	X	X	X	X
Update	X	X	X	X	X
Delete	X	X	X	X	X
Reassign ownership	X	X	X	X	X
Assign members	X	X	X	X	X
Link to enterprise group	X	X			
Create with update capabilities	X	X	X	X	X
Content					
View all	X	X	X	X	X
Update	X	X	X	X	X
Delete	X	X	X	X	X
Reassign ownership	X	X	X	X	X
Manage categories	X	X	X		
Publish web tools	X	X			
Portal Settings					
Security and infrastructure	X	X			
Organization website	X	X	X		
Collaborations	X	X			
Member roles	X	X			
Servers	X	X			
Utility services	X	X			

Table 4 –Administrative privileges for elevated MnDOT GIS Portal accounts

Content

The MnDOT GIS Portal supports many types of data. This allows for Portal to serve as a catalog of authoritative MnDOT content. When approaching the creation of a web map or an application it is critical to consider what content may already be available to you within Portal. Portal content can be searched for and filtered in a variety of ways to support this process. Just as valuable is to consider what content might be available from other organizations that users can consume in Portal. The goal is to determine if layers specific to your task requires creation or if another data source exists.

Searching for Content

The Portal website allows users to browse and search for enterprise content or content that has been shared with them.

Browse Content

The Content page of Portal is divided into tabs to support discovering items (My Content, My Favorites, My Groups, My Organization, and Living Atlas). Note that a user must have the privilege to create content to see the My Content tab. These tabs are used to discover content by applying filters such as categories, item type, tags, dates, and others. Users can sort and change the way items appear as filters are applied through views (List, Grid, Table).

Search Content

Content can be searched for using the search bar at the top of the Portal site or within the Content tabs mentioned above. This is useful for finding specific items in Portal. After searching with keywords, you can use filters to narrow results and sort as needed. See <https://enterprise.arcgis.com/en/portal/10.9.1/use/search.htm> for more information on browsing and searching for content.

ArcGIS Pro and ArcMap

Connecting desktop GIS to Portal provides users another way to work with content that has been shared to them.

To add a Portal connection in ArcGIS Pro:

- Open ArcGIS Pro > Open an existing or create a new Project
- Select the Projects tab and choose Portals > Add Portal
- Enter the URL for the Portal you are connecting to and click OK

ArcGIS Pro provides similar browse and search functionality through the catalog pane. Items can be filtered and sorted to narrow results. Items may be added to new or existing Pro maps as needed.

To add a Portal connection in ArcMap:

- Open ArcGIS Administrator > Choose Advanced > Manage Portal Connections > Add Portal Connection
- Enter the URL for the Portal you are connecting to and choose connect
- Open ArcMap > Choose File > Add Data > Add Data from Portal for ArcGIS...

While ArcMap can browse and search Portal content it is somewhat limited. You can search for items by keyword and view content through groups you are a member of. The capabilities to filter and sort items are not as robust as ArcGIS Pro.

See <https://enterprise.arcgis.com/en/portal/10.9.1/use/use-with-desktop.htm> for more information on connecting Portal to desktop GIS.

Creating Content

If users are unable to locate existing Portal items to meet their needs, then the data will need to be created. There are multiple ways to create Portal content. Note: All users, minus the MnDOT Viewer Role, have content creation privileges enabled and the ability to publish to Portal. These privileges enable users to publish hosted feature layers and to add items to their portal account.

Publish content from ArcGIS Pro and/or ArcMap

Publishing content from ArcGIS Pro and ArcMap is one option for adding items to Portal. Publishing content from desktop GIS gives users more control with the hosted feature layer that gets created in Portal (symbolology, labeling, scale dependencies, etc.). When a feature layer is shared as a web layer from ArcGIS Pro with the option to copy data, a hosted feature layer is created in Portal. Hosted feature layers are a way to share your content with other members of the organization. The data is copied from the source to Portal's data store. This is referred to as ArcGIS Managed data meaning that it resides in Portal's relational data store. See <https://enterprise.arcgis.com/en/portal/10.9.1/use/data-publishing-and-enterprise.htm> to learn more about publishing content to Portal.

Add items/files from a computer to your Portal content

Many types of items can be added to Portal. These can be csv files, zipped file geodatabases, zipped shapefiles, layer packages, or many other formats. For a list of supported items users may add to Portal see <https://enterprise.arcgis.com/en/portal/10.9.1/use/supported-items.htm>. Items added to Portal will be saved under the My Content space of the user account that added the item.

Some items added to Portal may then be published as hosted feature layers to be used in maps and applications. You must have privileges to publish hosted feature layers to do this. See <https://enterprise.arcgis.com/en/portal/10.9.1/use/publish-features.htm> for more information on publishing features.

Add items/files from computer to a Portal map

From the map viewer in Portal users may add layers directly to the map. These layers can be added from files on the user's computer. Items added from a computer to a Portal map include zipped shapefiles, csv or txt files, GPX files, and GeoJSON. See <https://enterprise.arcgis.com/en/portal/10.9.1/use/add-layers.htm> for more information on adding layers to a map. These items exist only in the current map and are not saved as items in a user's content. When a user saves the map, the added items are saved within the map that appears in their My Content tab of Portal.

Add items from the web

Items added from the web reference a REST endpoint URL and Portal do not store the data. Examples of web items include ArcGIS Server services, WFS, and WMS. See <https://enterprise.arcgis.com/en/portal/10.9.1/use/add-items.htm> for more information on adding items.

Create content in portal

Content can be created within Portal by using existing templates or from existing layers. This is done through the content tab of Portal where users can choose to create and select from several options. For example, a new hosted feature layer can be created from a variety of available templates related to the goal of the user. See <https://enterprise.arcgis.com/en/portal/10.9.1/use/publish-features.htm> for more information on building layers from templates.

Delete Protection

Delete protection is an option that can be checked on under a Portal item's general settings. This is recommended to be used when users do not want an item to be accidentally deleted.

Migrating Content

At version 10.9.1 there are a few options to migrate content from one Portal environment to another. These options include the ArcGIS API for Python, Group Import/Export tooling, and the ArcGIS Online Assistant. These are ways to move items through Development-Testing-Production Portals. This can also be applied when a copy of a Production content needs to be brought to Development or Testing for enhancements. Contact MNIT Enterprise GIS staff for support in migrating content between Portal environments.

Server-Based Services

Portal provides a platform for authoritative data to be shared with the organization through the publishing of ArcGIS Server services. This allows Portal users to move away from direct database connections while still providing a valuable resource for web maps and applications.

Services published to Portal's federated servers are automatically added as items. Those items may then be shared as needed and become discoverable to users.

Services published from relational database management systems (RDBMS) are considered user managed data sources. These can be added as portal items that reference the source data and do not copy anything to the Portal data store.

The ability to publish server-based layers/reference registered data in Portal is reserved for the Administrator and MNIT EGIS roles. Seek guidance from MNIT Enterprise GIS when considering the use of services for specific applications or services to be shared with the organization.

Bulk Publishing of Services

The MnDOT GIS Portal includes the ability to bulk publish layers from a user managed RDBMS source such as Oracle. This is a useful way to share authoritative MnDOT content with Portal users.

A service account can be created in a RDBMS and granted rights to view certain feature classes. That account can then be registered with Portal as a database data store item. It is important to understand what the service account has access to in the database as this process creates one feature layer item and one map image layer item for each feature class the account can see. Those items created in Portal may then be shared to groups and/or the organization as needed. Item details (title, description, tags, credits, and terms of use) are populated for these service items if the source metadata includes them.

If feature classes are added and granted to the database service account, then those additional services will be published following a layer sync of the Portal data store item. Similarly, if feature classes are no longer available to the database service account then those items will be removed as services following a layer sync. Syncing bulk published layers updates schemas and includes an option to update item details. Only the data store item owner can sync layers.

This privilege to bulk publish services is reserved for the Administrator and MNIT EGIS roles. Contact MNIT Enterprise GIS for more information on bulk publishing.

Geospatial Data Warehouse and Portal

Geospatial data that is currently shared with all MnDOT GIS users as part of the SDW (Spatial Data Warehouse) or is shared widely via the Enterprise Geospatial Data Warehouse, will also be made available in the GIS Portal as services and is by default classified as authoritative content. Likewise, when new data is added to the Enterprise Geospatial Data Warehouse and shared widely with GIS users it will also be published to the Portal and shared with all users in the Portal organization for use in GIS solutions. Exceptions to this standard practice will require additional configuration and will require an exception request. Contact MNIT Enterprise GIS for more information on these services.

Standards

The MnDOT GIS Portal will follow the AGOL Publishing Guide for ensuring content intended for sharing with the public adheres to appropriate standards. See <https://ihub/gis/> for the AGOL Guidance Document that includes the Publishing Guide.

While not all content published to Portal may be shared with the public and not required to be reviewed it is still vital for standards to be followed. This is important for Portal users to have confidence in what they are using and do so appropriately.

Portal is configured to use FGDC Content Standard for Digital Geospatial Metadata (CSDGM) as the style for metadata.

Portal content should include the following on the item details page:

- Title
 - What users see when they access the item. Should be clear and concise.
- Summary
 - Brief summary displayed when users search for Portal content.
- Description
 - Detailed description of the item explaining its purpose.
- Categories
 - Categories have been configured in Portal following ISO standards. Portal items should apply these categories to aid in the browsing, searching, and filtering of content. These may be adjusted by the Administrator or MnDOT Administrator roles.
- Tags
 - Keywords applied to Portal items to support the searching of content.
- Terms of Use
 - How the item should be used and by whom. MnDOT maps and related data disclaimer must be included in published maps and applications.

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- Credits
 - Required if credit is to be given for data providers.

Groups

Portal groups provide users a way to organize items related to a specific topic, functional area, office, district, or organization. Groups can be created and managed within Portal or they can be linked to existing enterprise AD Groups. All roles have the privilege to join groups and view content provided the group manager allows it.

Portal Groups

Portal controlled groups can be created and managed by Administrators, Coordinators, and Publishers. Prior to creating a new group be sure to search Portal for an existing group that might work for your intended audience.

Consider the following when creating a new group:

- Who can view the group?
 - Group members
 - All MnDOT Portal Users
 - Everyone (public)
 - Note that sharing with the public can only be done by an Administrator or MnDOT Administrator following a review process. See the section on sharing for more information.
- Who can join the group?
 - Those that request and are approved
 - Those invited to the group
 - Anyone
- Who can contribute?
 - Group members
 - Only the group owner and managers
- What items in the group can members update?
 - Only their items
 - All items

The group overview page provides information specific to the created group. Portal groups should include the following information on the group overview page:

- Group Name
 - What users see when they search for groups. Should be clear and concise.
- Summary
 - Brief summary displayed when users search for groups.
- Description
 - Detailed description of the group explaining its purpose.
- Tags
 - Keywords applied to Portal groups to support searching.

See <https://enterprise.arcgis.com/en/portal/10.9.1/use/groups.htm> for more information on using groups in Portal.

Enterprise AD Groups

Portal groups may be linked to an existing enterprise AD group. Membership to such groups is then controlled outside of Portal and through MNDOT Identity Management (MIM). This could be beneficial for Portal groups that need to follow membership of an Enterprise AD security group. When Portal links to an enterprise AD group any current Portal user that is a member of the AD group will see the Portal group at login. Any members of the enterprise AD group that are not Portal users would need to have a portal account created to access the Portal group.

The administrator and MNIT EGIS roles may link to enterprise AD groups. Contact MNIT Enterprise GIS for more information on using enterprise AD Groups.

Sharing

Sharing is the means of allowing access to content cataloged in Portal. Initially, when users add content to Portal items are available to the user and members in roles with the ability to view all content. Careful consideration should be given to how Portal content is shared.

Groups

Sharing to a group is a good way to target content to a subset of Portal users. All roles minus MnDOT viewer may share content to groups.

MnDOT Portal

Content shared to the MnDOT Portal is for items relevant to the entire Portal. This would include authoritative data and applications for use by the organization. All roles minus MnDOT Publisher, MnDOT Analyst, and MnDOT Viewer may share content to the organization.

Everyone

Sharing Portal content to everyone means anyone with access to Portal can find and use it. The ability to share with everyone is only granted to the Administrator and MnDOT Administrator roles following a review process. The Portal review process will follow the current AGOL review process.

See <https://ihub/gis/> for the AGOL Guidance Document and review process.

Collaborations

Collaborations are a way to share content between organizations. These can be created Portal to Portal, between multiple Portals, or from Portal to AGOL. Collaborations can be configured for select content to be viewed, created, edited, or shared among participants. The Administrator and MNIT EGIS roles can create collaborations. Contact MNIT Enterprise GIS for more information on collaborations.

Sites

ArcGIS Enterprise Sites allow custom web pages to be created to guide Portal users to featured content for the organization or a group. This functionality allows a user to tailor a view of Portal that is focused on their content. This can be beneficial for users that wish to sidestep searching for content and be directed to items that matter to them. The Administrator, MNIT EGIS, MnDOT Administrator, and MnDOT Coordinator roles can create Sites in Portal.

Maintenance

Content Maintenance

All Portal users are expected to review their content regularly for relevance and clean out items no longer needed. Note that prior to deleting content Portal users must determine if the items are records and comply with [Records Management](#) and the MnDOT Retention Schedule. Content will be reviewed annually for quality by MnDOT Administrators and MnDOT Coordinators.

This review will check for things such as:

- Incomplete item details
- Identify duplicate datasets
- Development/Test content in Production
- Items that have not been viewed/inactivity
- Use of categories and tags

User Maintenance

Users removed from Active Directory remain as members in Portal. Those users need to be removed from Portal manually by a MnDOT Administrator or MnDOT Coordinator. Prior to removing users from Portal any licenses assigned to the user should be revoked and content/groups owned by the user need to be reassigned appropriately. Note it is MnDOT's responsibility to reassign ownership of items owned by the user to an appropriate MnDOT Portal member or determine if the items are to be deleted. MNIT will not be responsible for retaining content when accounts are removed from Portal.

User roles and privileges outlined in this document may be adjusted as needed to reflect MnDOT needs. Requested adjustments will be reviewed by Administrators upon request.

Group Maintenance

Groups will be reviewed annually for relevance by MnDOT Administrators and MnDOT Coordinators. Group owners are responsible for managing their group's membership, ensuring the group overview page is up to date with required information, and items are shared appropriately. Group owners should delete their group from Portal if the group is no longer needed.

Enhancements

Additional Portal functionality will be considered based on user needs and following a review by Administrators. Enhancements to ArcGIS Enterprise would include those available at the current release but not yet implemented at MnDOT.

Upgrades

Currently ArcGIS Enterprise deployed at MnDOT is at version 10.9.1. ESRI typically releases new versions of Enterprise twice per year. Upgrades will be considered by MNIT and follow the Development-Testing-Production deployment cycle. Content and functionality will be reviewed during this process to determine any impacts to Portal.

Known Limitations/Issues

There exists a known issue with users not able to connect to the MnDOT GIS Portal using ArcGIS Collector and ArcGIS Field Maps applications on Android devices. This is logged as an official bug with ESRI. The workaround is to add an extra slash to the Portal URL (for example, <https://webgis.dot.state.mn.us/egis65//>). Portal members who wish to use those applications with the MnDOT GIS Portal may do so on iOS devices without the extra slash.

At version 10.9.1 there is an ESRI bug that prevents users from updating a field alias, list, and domain in hosted feature layers. An error will appear stating "{code: 500, message: \"JSONObject[\"description\"] is not a string\"}. The workaround is to add a field description and save it first. That will allow a user to then edit the field alias, list, and/or domain.

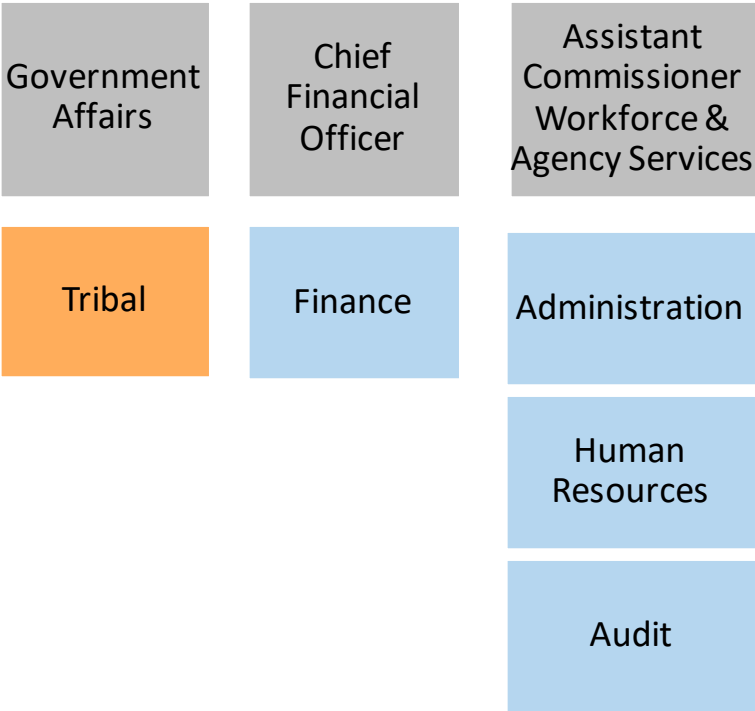
At version 10.9.1 there is an ESRI bug that displays a warning when attempting to share content to groups. "Items owned by a Public Account must be shared to Everyone before sharing to a group. Update share levels to Everyone and go to Group Sharing" This appears for Portal members that do not have the privilege to share content to the organization. The workaround is to click "Update" in the dialog box. It will allow the user to share to a group and will not update the sharing level to everyone.

MNIT Support

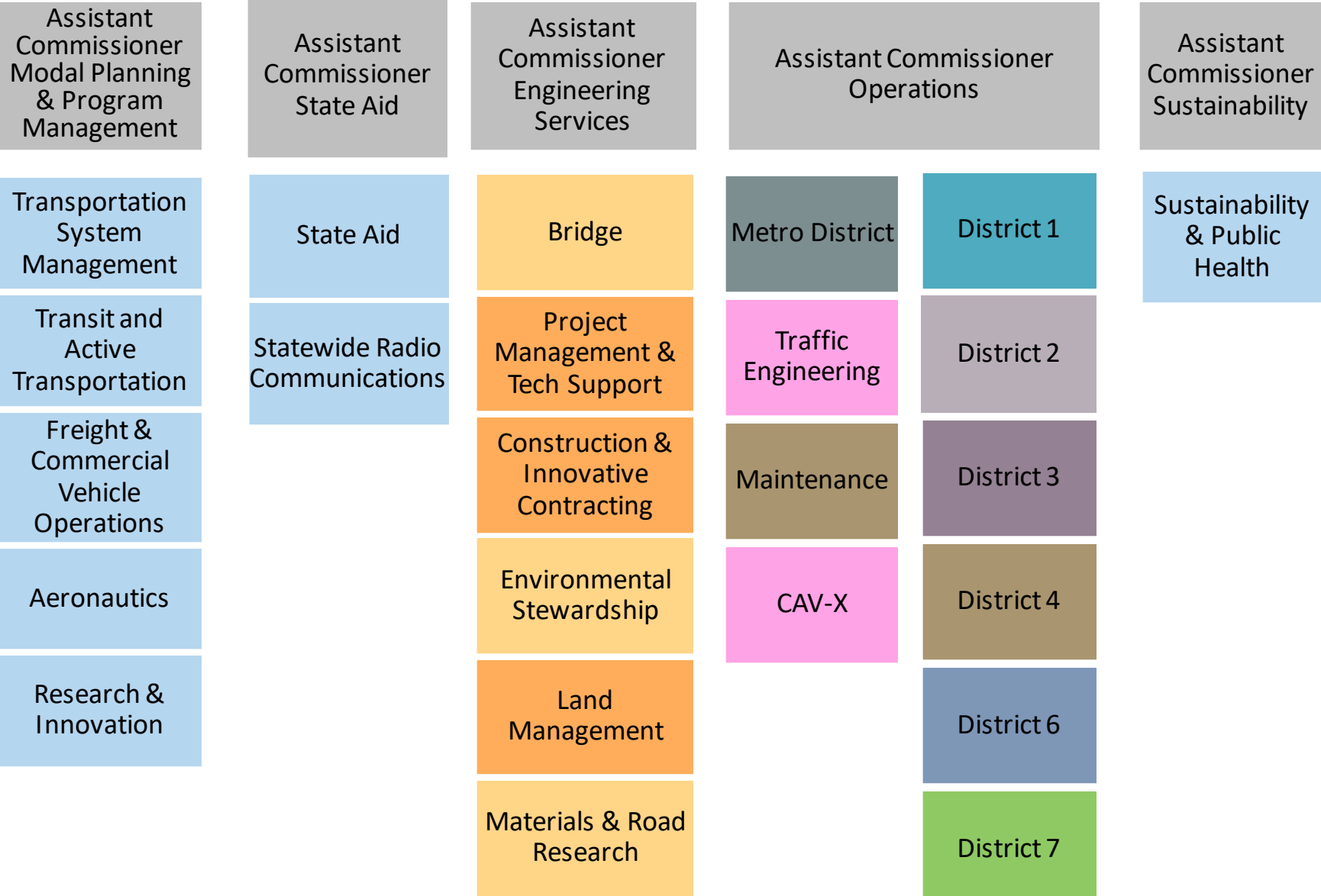
GIS Coordinators and Web GIS Administrators should be the primary resource for users needing help. Users having technical issues with Portal may submit an IT service request for support from MNIT Enterprise GIS (EGIS) staff. EGIS staff will work with the user to recreate the issue or step through troubleshooting. If necessary, EGIS will submit a support ticket to ESRI. MNIT EGIS staff will not be expected to provide staff augmentation outside of a work order or project.

Commissioner

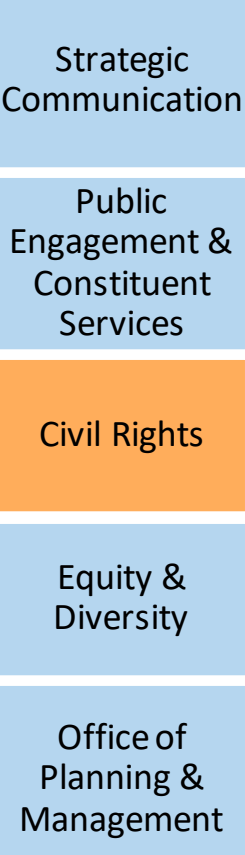
Deputy Commissioner & Chief Administrative Officer



Deputy Commissioner & Chief Engineer



Chief of Staff



Chief Counsel



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