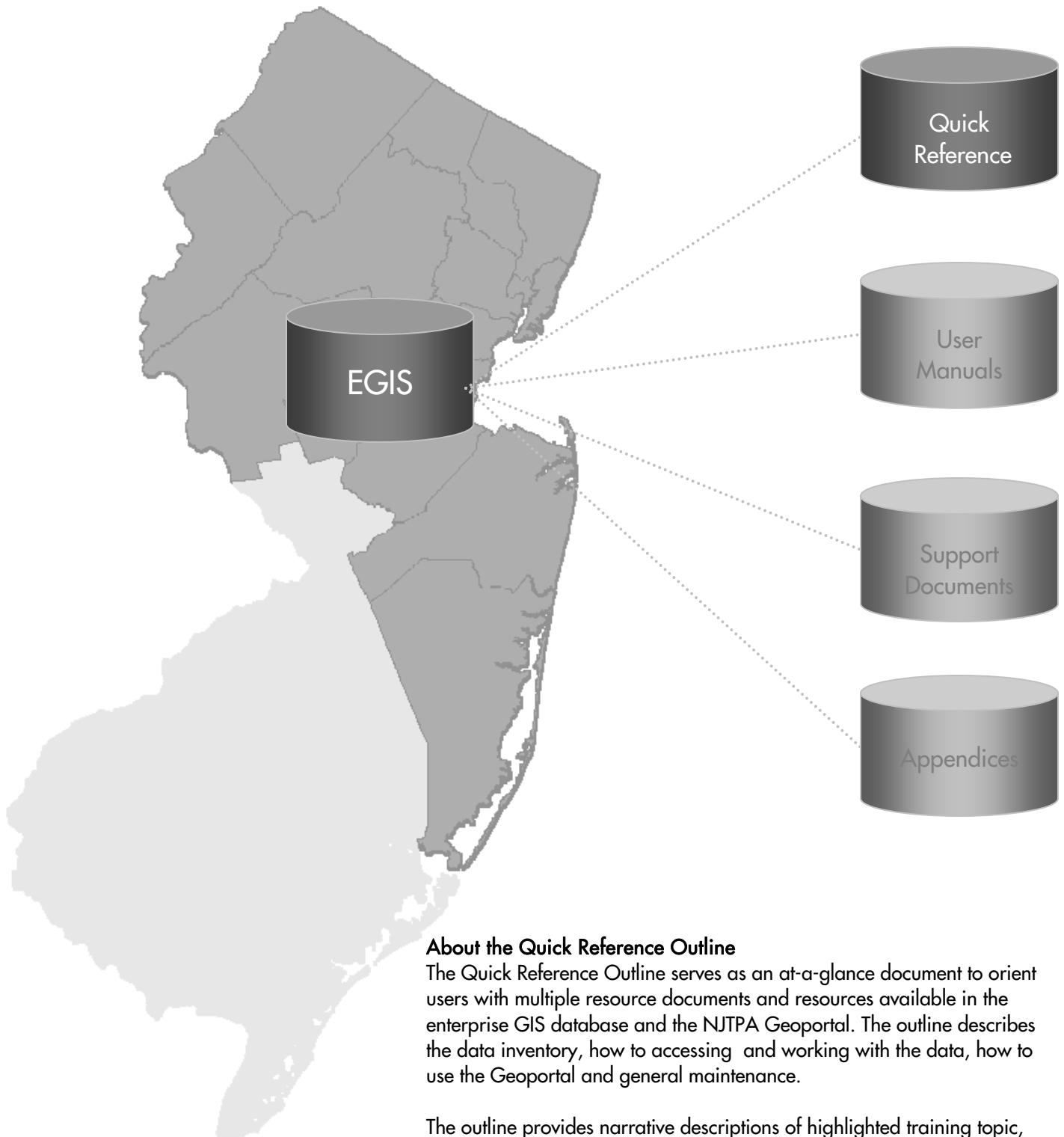


# NJTPA Enterprise GIS (EGIS) User Manual

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## About the Quick Reference Outline

The Quick Reference Outline serves as an at-a-glance document to orient users with multiple resource documents and resources available in the enterprise GIS database and the NJTPA Geoportal. The outline describes the data inventory, how to accessing and working with the data, how to use the Geoportal and general maintenance.

The outline provides narrative descriptions of highlighted training topic, step-by-step directions for key tasks, and reference bookmarks for users that desire more detail.

## EGIS User's Training

### I. Introduction to EGIS – What is it?

- a. Multi-User access to a dynamically updated *Geodatabase*
  - i. A spatially enabled database composed of over 250 tables, GIS layers and data views generated by NJTPA and partner agencies
- b. *NJTPA Geoportal*
  - i. A public-facing website containing a catalog of NJTPA and partner agency data inventory, documentation, contact information, downloadable data (ArcGIS shapefiles and Excel Tables), map services (pre-made maps) and other GIS resources

### II. Data Inventory

- a. Spatial and Non-spatial data generated by NJTPA and partner agencies
  - i. All data contained in one production database, direct connect available via authorized access only
- b. Using EGIS Database Inventory
  - i. The EGIS dynamically updated inventory can be viewed on the NJTPA Geoportal web site:  
<http://geoportal.njtpa.org:8080/geoportal/catalog/inventory/inventory.page>
  - ii. Database naming conventions and representation standards- ArcCatalog

**Reference:** *EGIS User Manual pg.-6, Sec. 2*

#### **Standards and Representations**

##### Naming Conventions: Database Name vs. Name

⇒ lp\_SE2Place vs. Strategy Evaluation 2 Places (l = layer, p=planning, both letter categories)

##### How to Read the Database Name and Data Model

The logical data model contains a set of standards and representations as follows.

⇒ Blue tables are business / non-GIS tables, and begin with the letter “t”  
⇒ White table are GIS tables, and begin with the letter “l,” followed by a second letter that denotes the NJTPA GIS data category. The *data framework categories* are as follows:

- c = Cadastral
- d = Design Plans
- e = Environmental
- f = Facilities
- g = General
- p = Planning
- pb = Political Boundaries
- t = Transportation
- u = Utilities

- iii. To organize the data model and to help manage associated with specific NJTPA tasks, tables are grouped into 14-subject areas.

**Reference: *EGIS User Manual pg.-7, Sec. 2***

#	Name
1	Capital Program
2	Strategy Evaluation/Refinement Area
3	Regional Planning Studies
4	Air Quality Conformity
5	NJ Congestion Management System
6	Transit
7	Freight Assessment
8	Census
9	Safety
10	New Jersey Regional Travel Model Enhanced (NJRTME)
11	Socio Economic Forecasting
12	Land Use
13	Regional Household Travel Surveys
14	NJDOT Management Systems

### III. Accessing the EGIS Geodatabase

- a. Authorized Database Connection – ArcCatalog

**Reference: *EGIS User Manual, pg.-7, Sec. 3.1***

#### Connecting to Geodatabase

1. Open ArcCatalog
2. Double Click “Database Connections” in the left navigation tree window.
3. Double click “Add Spatial Database Connection”
4. Enter the information as depicted below included your given password.

**Spatial Database Connection Properties**

Server: TPA-D08

Service: sde:sqlserver.TPA-D08

Database: GDB\_PROD  
(If supported by your DBMS)

Account

Database authentication

Username: egis\_user

Password: [Masked]

Save username and password

Operating system authentication

Connection details

The following transactional version will be used:

sde.DEFAULT


Save the transactional version name with the connection file.

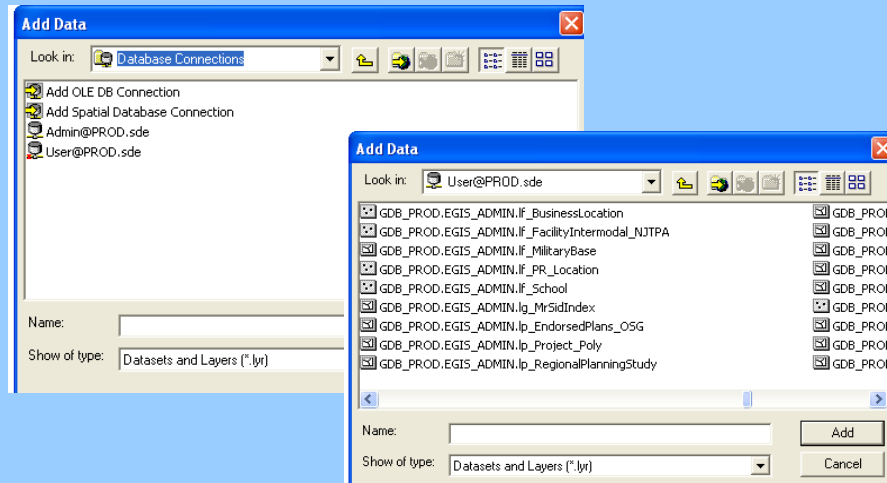
## IV. Working with the Data

- a. Adding layers from Geodatabase with authorized access

**Reference:** *EGIS User Manual, pg.-7, Sec. 3.1 (Authorized Connection)*

### Adding data from Geodatabase

1. Click 'Add Data' button 
2. 'Look in:' the *Database Connections* folder locate User connection to EGIS database (must be create previously in ArcCatalog)
3. Add layers from EGIS database



- b. Adding map services available on NJTPA Geoportal to ArcMap
  - i. Access via NJTPA Geoportal

**Reference:** *EGIS User Manual, pg.-11, Sec. 4.2*

### Opening Map Services from Geoportal

1. Go to:  
<http://geoportal.njtpa.org:8080/geoportal/catalog/main/home.page>
2. Click the 'Map Services' tab
3. Choose the desired map service by clicking the 'ArcMap' link under the description
4. Click 'Open' button to launch ArcMap automatically.
5. Expand service and layers as appropriate

- ii. Access via ArcCatalog

**Reference:** *EGIS User Manual, pg.-9, Sec. 3.3*

### Connecting to Map Services in ArcCatalog

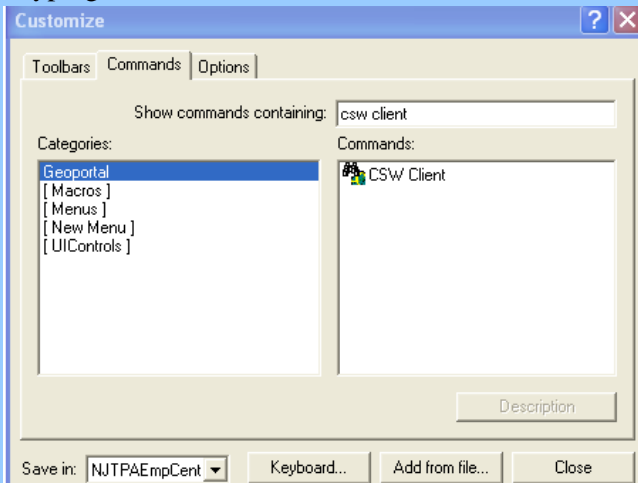
1. Go to and expand 'GIS Server'
2. Double click 'Add ArcGIS Server'
3. Select 'Use GIS Services' and click 'Next>'
4. Select Internet Server URL:  
<http://geoportal.njtpa.org/ArcGIS/services> and click 'Finish'
5. Expand service and layers as appropriate in ArcCatalog

iii. Access via CS-W Client

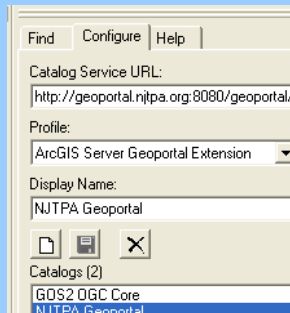
Reference: *EGIS User Manual, pg.-10, Sec. 3.3*

### Connecting to Map Services in ArcCatalog

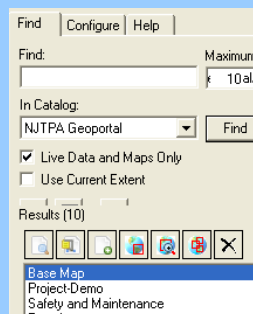
1. Download CSW client from [http://www.njtpa.org/DataMap/GIS/Enterpr\\_GIS/NJTPA\\_Enterprise\\_GIS.aspx](http://www.njtpa.org/DataMap/GIS/Enterpr_GIS/NJTPA_Enterprise_GIS.aspx) or request the file from [zfields@njtpa.org](mailto:zfields@njtpa.org) and install it
2. Add CSW Client to Toolbar by going to 'Tools' – 'Customize..' and typing "CSW Client" in the command box.



3. Drag and drop icon on menu bar and click to launch CSW Client
4. Go to the 'Configure' tab and click the "New" icon
5. Enter NJTPA Geoportal in the 'Display Name' and enter the 'Catalog Service URL' as:  
<http://geoportal.njtpa.org:8080/geoportal/csw/discovery?Request=GetCapabilities&Service=CSW&Version=2.0.2>



6. In the Find tab, choose the NJTPA Geoportal from 'In Catalog'
7. Select 'Live Data and Maps Only'
8. Search the NJTPA Geoportal content the "Results" box



- c. Replicating Database and Map Services
  - i. Replication options will be explored on an individual agency basis

**Reference: *EGIS Data Replication and Extraction***

- d. Extracting Data – ArcMap and NJTPA Geoportal
  - i. Users must have ArcGIS 9.3.1 or later to extract data directly from the geodatabase

**Reference: *EGIS User Manual, pg.-10, Sec. 3.3***


In ArcMap

1. Add the “Distributed Geodatabase” toolbar, by going to ‘View,’ ‘Toolbars,’ ‘Distributed Geodatabase’



2. Select the Extract Data tool on the far right as shown
3. Select a destination for your personal geodatabase
4. Once all the steps of the “Post Data Extraction Options” wizard are finished, the personal geodatabase will contain the items of initially chosen map services

From Geoportal: Extract Data and Receive via Email

1. Click ‘Extract Data’ tab
2. Click the “Draw desired area” icon: 
3. Draw a polygon around the area of interest
4. Check the desired data layers in the selection box to the right
5. Enter a destination e-mail address and click “Extract Data” button

From Geoportal: Download from Dynamic Inventory

1. Click ‘Inventory’ tab
2. Navigate through data available for download by sorting through pages or “Subject Area” links
3. Click desired ‘Table’ or ‘GIS Layer’
4. Open or save file

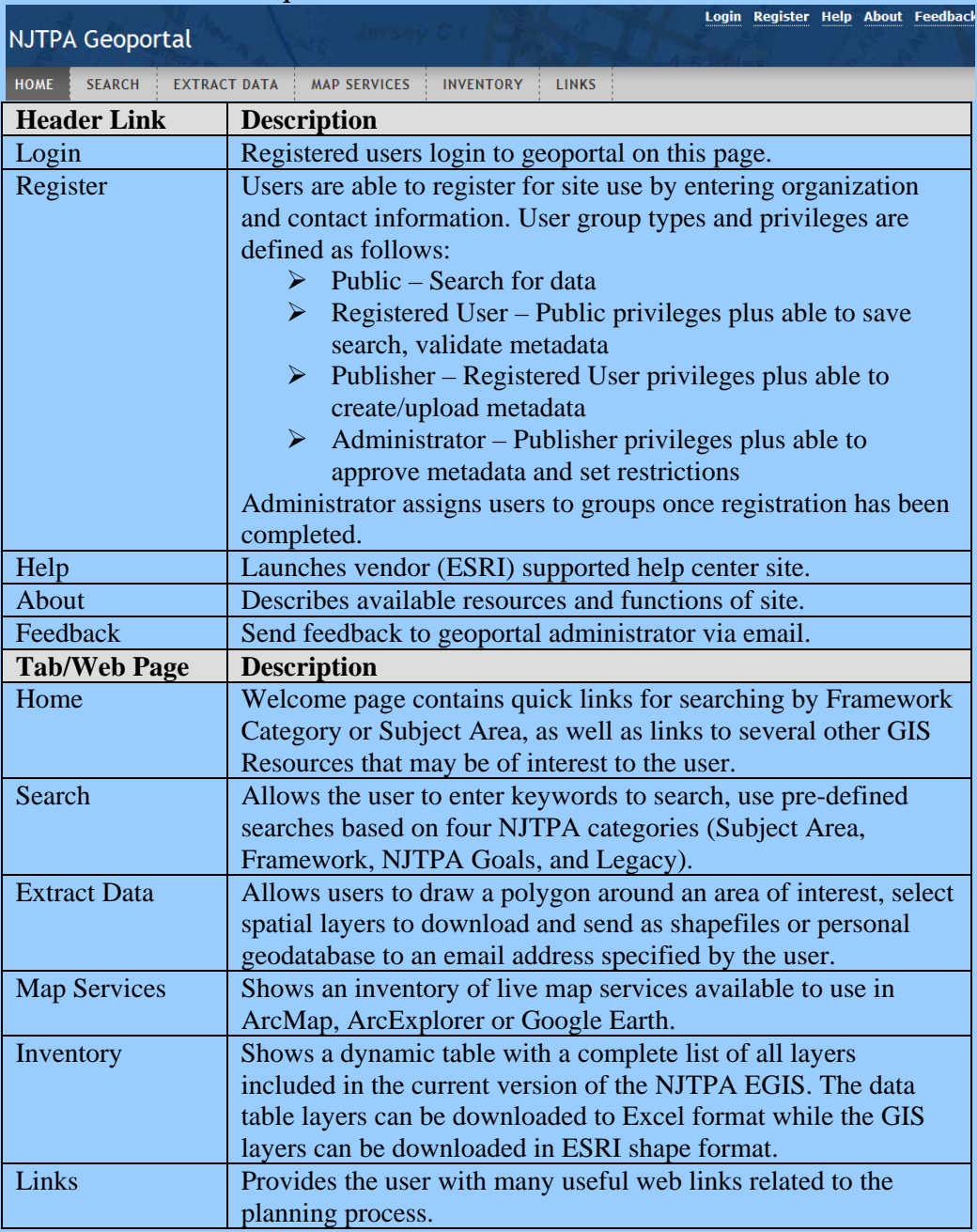
- e. Using Model Building clipping tool – By NJTPA region or Subregion

**Reference: *Clip Model Documentation***

## V. Using NJTPA Geoportal

- a. The NJTPA Geoportal attempts to centrally locate a wealth of the data suitable for particular uses - by NJTPA staff, NJTPA subregions, partner agencies and the general public. This site is intended to orient users on how to:
  - i. View the contents of the Geodatabase inventory (Extract Data, Map Services and Inventory tabs)
  - ii. Search for items of interest (Home, Search and Inventory tabs)
  - iii. Link to NJTPA map services and other data resources (Map Services and Links tabs)
- b. Description of the Geoportal

**Reference: NJTPA Geoportal User Manual**



The screenshot shows the NJTPA Geoportal interface. At the top right, there are links for Login, Register, Help, About, and Feedback. Below this is a navigation menu with tabs for HOME, SEARCH, EXTRACT DATA, MAP SERVICES, INVENTORY, and LINKS. The main content area contains a table with two sections: one for Header Links and one for Tab/Web Pages.

Header Link	Description
Login	Registered users login to geoportal on this page.
Register	Users are able to register for site use by entering organization and contact information. User group types and privileges are defined as follows: <ul style="list-style-type: none"> <li>➤ Public – Search for data</li> <li>➤ Registered User – Public privileges plus able to save search, validate metadata</li> <li>➤ Publisher – Registered User privileges plus able to create/upload metadata</li> <li>➤ Administrator – Publisher privileges plus able to approve metadata and set restrictions</li> </ul> Administrator assigns users to groups once registration has been completed.
Help	Launches vendor (ESRI) supported help center site.
About	Describes available resources and functions of site.
Feedback	Send feedback to geoportal administrator via email.
Tab/Web Page	Description
Home	Welcome page contains quick links for searching by Framework Category or Subject Area, as well as links to several other GIS Resources that may be of interest to the user.
Search	Allows the user to enter keywords to search, use pre-defined searches based on four NJTPA categories (Subject Area, Framework, NJTPA Goals, and Legacy).
Extract Data	Allows users to draw a polygon around an area of interest, select spatial layers to download and send as shapefiles or personal geodatabase to an email address specified by the user.
Map Services	Shows an inventory of live map services available to use in ArcMap, ArcExplorer or Google Earth.
Inventory	Shows a dynamic table with a complete list of all layers included in the current version of the NJTPA EGIS. The data table layers can be downloaded to Excel format while the GIS layers can be downloaded in ESRI shape format.
Links	Provides the user with many useful web links related to the planning process.

## VI. General Maintenance

- a. Maintenance Plan – Overview of EGIS User Responsibility

**Reference: *EGIS User Manual, pg.-5, Table-1***

- b. Maintenance Schedule (For identified contributors only)

- i. First Quarter: July 1st to July 15th
- ii. Second Quarter: October 1st to October 15th
- iii. Third Quarter: January 1st to January 15th
- iv. Fourth Quarter: April 1st to April 15<sup>th</sup>

- c. XML Metadata Maintenance Standards (For identified contributors only)

**Reference: *Metadata Reference Guide for NJTPA Geoportal***

- d. Review User Manuals, Support Document and Appendices

- i. EGIS User Manual
- ii. NJTPA Geoportal User Manual
- iii. Support Documents
  - 1. EGIS Data Replication and Extraction
  - 2. Clip Model Documentation
- iv. Appendices
  - 1. EGIS Data Model
  - 2. EGIS Data Inventory
  - 3. EGIS Quality Assurance Program
  - 4. Metadata Reference Guide for NJTPA Geoportal