

Editing of Land Use Classification



Figure 1. Input Ortho Imagery Wayne County

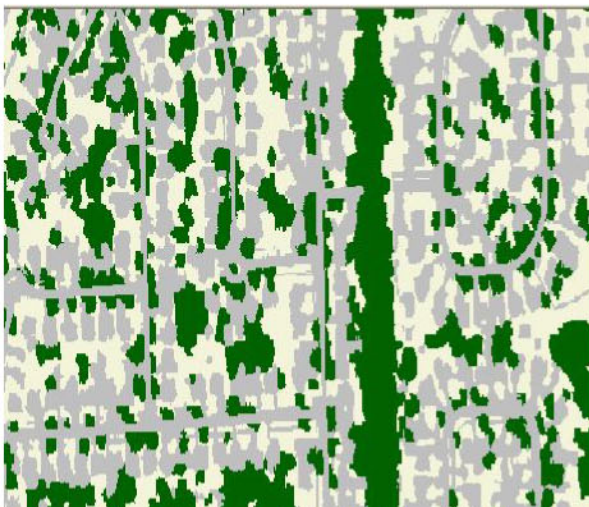


Figure 2. Input Automated Classified Imagery Wayne County

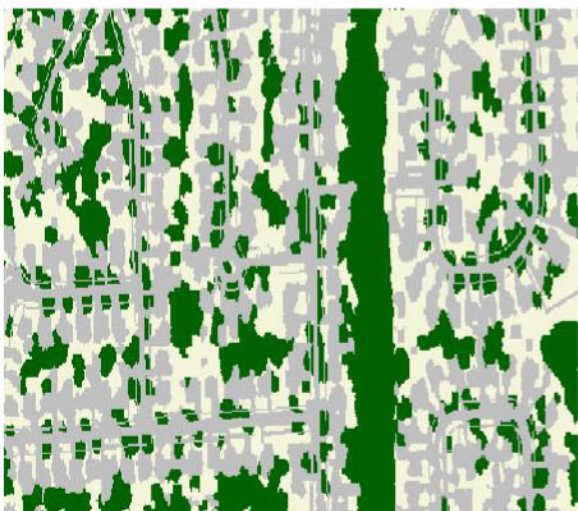


Figure 3. Output Manual Edited Classified Imagery Wayne County

Highlights:

Pervious & impervious classification improvement using Manual Editing for more than 5000 Sq Mi.

Business Need:

The client intended to create more accurate classification of the land uses to derive more exact area under Impervious & pervious nature of the land with in the county boundaries. This will be most critical element in environmental assessment and determines the efforts required in planning & managing the future needs of the development and to better control the manmade disasters.

Area Covered:

This project covers manual editing of 5 counties of US to produce county wise mosaic classified data

Inputs Used:

Ortho photo:

High Resolution Orthophotography to use the base for classification

Classified Imagery:

The basic automated classification which will be used as base for refinement.

Business Solution:

The automatic classification of land use is not so accurate to derive the accurate pervious and impervious information due to the spectral similarity between few classes. Hence it is always mandatory to incorporate the manual editing locally to improve the classification of the features with similar spectral signatures.

While doing manual editing of existing classes more attention will be paid to the editing of impervious features like road, building, sidewalks & driveways which were misclassified during the automated process to achieve high accuracy in representation of classified Imagery.

Editing of Woody vegetation & water is in the second priority in manual editing and the remaining non woody & bare classes are in third priority.

The deliverables will go in two phases. In the first phase we will deliver the data after editing to client and client would done a QC over the production areas and send us feedback points to fix where need to edit more with respect to the elements represented in the Ortho imagery.

In the second phase the feedback from the client will be implemented to achieve the desired results.

Finally all the production areas of the county will be merged to produce a county wise mosaic

Project Shipment:

The shipment were made in three stages to client to get more accuracy in manual cleanu and deliver a full county:

- i. Manual Edited Version 1 Cleaned Up Imagery.
- ii. Manual Edited Version 2 Cleaned Up imagery after fixing QC points
- iii. Manual edited edges of different Production areas of the county in single Imagery.

iv.

Software Used:

- i) Erdas Imagine 9.2