ALDOT Link-Node Webmap Portal

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Introduction

In order to conform to FHWA standards for Highway Performance Monitoring, ALDOT has created an Enterprise GIS system (eGIS) which includes a routable roadway network. Historic crashes are recorded with two linear referencing methods, route-milepost on state routes, and **link-node** on local roads.
After the migration of two roadway datasets, the ALDOT is working with the Center for Advanced Public Safety at the University of Alabama to develop a GIS-based webmap of all state roads and intersections with labels that can be used for crash mapping by police and act as a data inventory for state transportation assets.

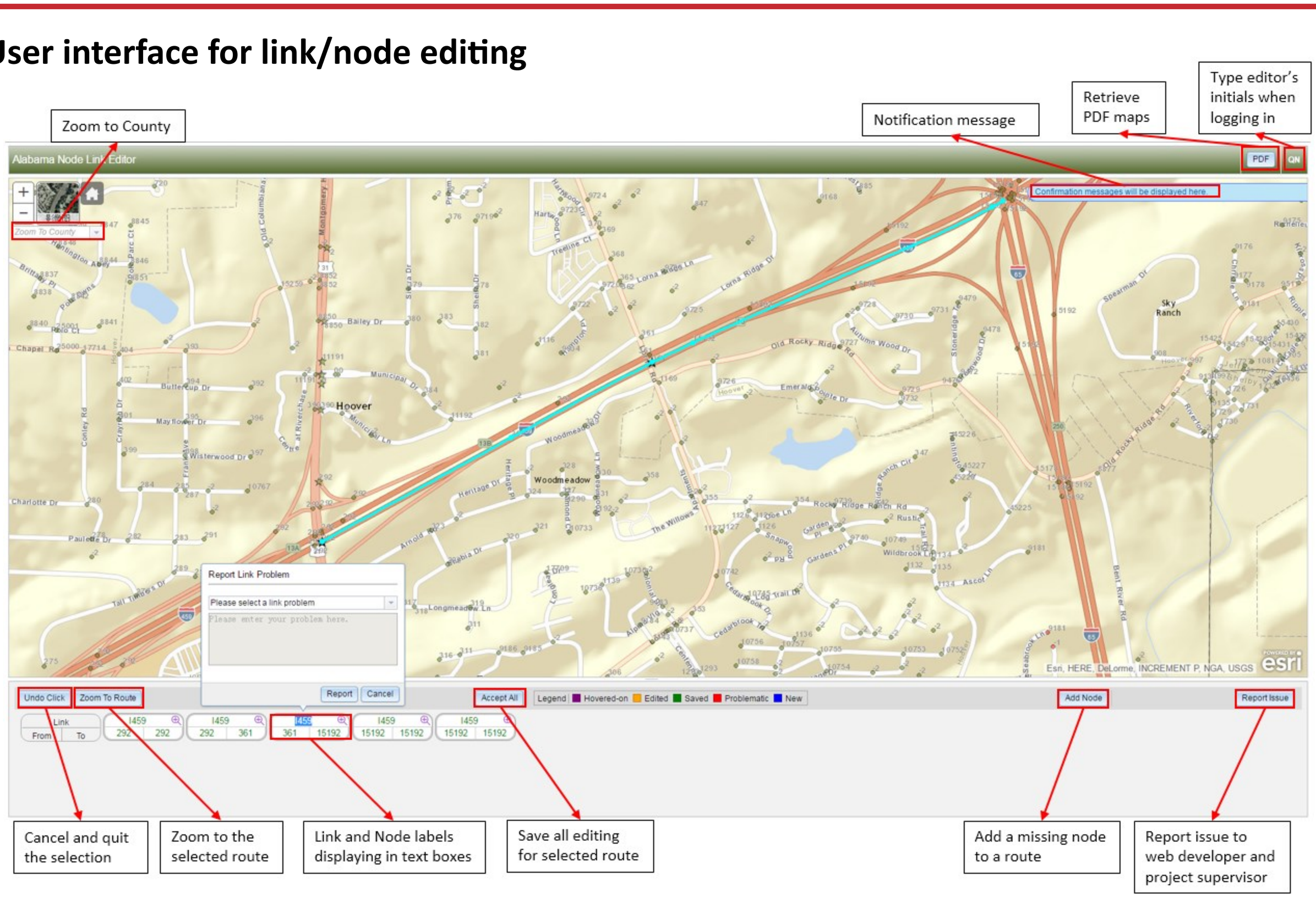
Objectives

This webmap portal will allow authorized users to:

- zoom into areas on a GIS map displaying the links and nodes when the zoom reaches a predetermined resolution
- retrieve the corresponding PDF maps (the inventory of link/node data) at different resolution levels to conduct QAQC procedures
- correct the node and link labels where needed
- submit problem types where links and nodes do not correspond to the PDF maps

GIS-Based Webmap Portal

User interface for link/node editing



Results and Conclusion

- The GIS-Based webmap portal can support multi-editors working online simultaneously.
- All Interstate and State Routes are finished validating by using this webmap portal.
- Incongruencies in roadway networks affect the accuracy of the data, but this webmap portal greatly reduces the amount of time that manual validation procedures in desktops will require.

Future Work

- Additional editing on full state areas
- Conduct accuracy percentage calculation based on validated link and node data
- Transfer old crashes to the eGIS System
- Map new crashes to the eGIS system while retaining crash information from the old LRM.

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