

Fayetteville Communications and Technology Department

PROJECT INITIATION REQUEST FORM

Date: 9/16/2008

Project Name:

FPS Online Transportation Information System (OTIS)

Project Summary:

We, as a district, will work to provide a secure, online application that will allow our stakeholders access to information and maps for the Fayetteville Public Schools Transportation Routes for the 2009-2010 school year.

It is the district goal to develop a database structure that will allow us to migrate and manage GIS information from the existing spreadsheet used by the FPS Transportation Department. It is the purpose of the database to provide greater data integrity and 100% geocoding accuracy. It is the subsequent goal of the database to increase the efficiency of the Fayetteville Public Schools transportation routing and scheduling system.

By providing access to an online routing system, the district will be supporting the implementation of Strategic Goal #3 (Improve efficiency and quality of operations...) and Strategic Goal #6 (Continually and effectively communicate with all stakeholders).

Project Manager: Patty Plummer

Project Sponsor: John L Colbert

Budget Source: District Funds

Authorization:

I [John L Colbert](#), as Project Sponsor, hereby authorize [Patty Plummer](#), Project Manager, to develop a detailed Project Plan for implementation of this project.

Project Sponsor

Project Manager



Fayetteville Communications and Technology Department

PROJECT PLAN

Date: 9/16/2008

Project Name: FPS Online Transportation Information System (OTIS)

Project Statement: Access to district bus stop information online

Objectives: Work with Transportation Director, Tommy Davenport, his Assistant, Roy Wilson, and Enterprise Services Database Administrator, Tom Meyer to develop a database structure and online vehicle for public access to transportation information for school year 2009-2010.

Functional Requirements: The ability to access a secure database online by entering in one address and receiving the necessary information for the associated bus stops (both data and visual map forms).

Stakeholders: Transportation, Technology, District, Parents

Resources: Transportation, Technology, Washington County

Reporting: Patty Plummer will report monthly progress updates via email to the development team: Tom Meyer, Tommy Davenport, Roy Wilson, Susan Norton, John L Colbert - and schedule meetings upon completion of targeted phases for review.

Assumptions: Sufficient Budget

Constraints: Time

Risks and Mitigation Strategies:

Data integrity/Data accuracy vs. Central Registration vs. Training/Accountability

Open Issues: Competing projects vs. Time needed to complete

Supporting Documents:

Date: September 16, 2008

Topic: Meeting to discuss online bus routes project

Present: Tommy Davenport, Roy Wilson, Tom Meyer, Susan Norton, John L Colbert, Patty Plummer

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PROJECT PLAN

Last year Randy Willison initiated the discussion to geocode addresses from the FPS Transportation Dept. and use that info to generate maps and post online for parents to access. Tom Meyer from the Technology Department-GIS Program was pulled in to the initial discussions, but he was not comfortable with releasing the info or subsequent mapping until we achieved greater accuracy with the addresses and routed stops.

Most of the issues with addresses not geocoding are directly related to incorrect zipcodes, but other issues can be attributed to human error and improper entry of address suffixes (ie. St, Dr, Pl).

Tom is working with the most accurate base layer available in that he uses the county 911 maps. Recommendation for updating the base layer is 2 times a year. He has also recently received an updated layer from the City of Fayetteville for sidewalks.

Tom currently needs ALL of the addresses in the FPS Transportation Department spreadsheet to geocode correctly, and has provided the department with a highlighted spreadsheet for those addresses that are not coding correctly. He will continue to work with the department to get the spreadsheet updated and data cleaned up. The end goal is to move from the spreadsheet to the NEW database Tom will structure for greater data integrity and 100% geocoding accuracy. From this database, Tom will generate bus stop maps for Transportation to review and post on the web. In conjunction with this database, a corresponding interface will be developed to allow parents to enter in Student ID for bus stop info/assignment via the web.

It is the overall objective of this project to provide 1 database – 1 address – 1 route. The district wants to provide parents the ability to see the bus stop/route assigned to their students, no matter the school, in a SECURE environment for the safety of the students. It is the secondary intentions of the Technology Department to have all the data reside on the same server to make it easier for both Transportation and Technology to collaborate, communicate and update in real-time.

Security protocol at the secondary level for parent access (ie. Gradebook) is the student assigned ID# and birthdate for password... need to look into elementary protocol?

In addition to creating the online vehicle, we also need to post a criteria/faq for standard protocol/guidelines followed by FPS Transportation Dept to determine routes – just as a matter of info to parents.

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PROJECT PLAN

The title for this project: FPS Online Transportation Information System (OTIS)

Phased Implementation of the Project will go as follows:

Phase 1A: Tom/Roy: Update addresses for geocoding accuracy; define terminology (overall “route” is made up of several “runs” as defined by time of day and school.)

Phase 1B: Tom: Develop new database structure and associated online vehicle
Roy: Develop unique identifiers for each route in the database

Estimated length of time for completion of Phase 1: 6-8 weeks (FALL)

Phase 2: Tom: Migrate updated spreadsheet into the new database
Roy: Test the new database and continue data cleanup

Estimated length of time for completion of Phase 2: 8-12 weeks (SPRING)

Phase 3A: Tommy/Roy: Develop FAQ for routing criteria to post on the web
Tom: Develop public interface for routing access to post on the web

Phase 3B: Soft launch of OTIS for testing and evaluation!
(The goal is to have OTIS up and running for the 2009-2010 school year)

Estimated length of time for completion of Phase 3: 6-8 weeks (SUMMER)

Phase 4: Tom: Additional functionalities to include: web-based forms for additional information, auto generate maps, hosting routes on interactive maps, auto generate layers, route selection by letter/route selection by school, route indexing for drivers, routing for transfers...

Approval:

Project Sponsor

Project Manager

