



WELLTON BRANCH

RAILROAD REHABILITATION STUDY MARCH 2014

ADOT

The Wellton Branch Railroad Rehabilitation Study was conducted in an effort to understand the existing conditions of the Union Pacific Railroad's (UPRR) Wellton Branch and to develop improvement scenarios and capital cost estimates for freight and passenger rail service between Arlington and Wellton, a distance of 90.8 miles. This segment of track needs varying levels of rehabilitation depending on what Federal Railroad Administration (FRA) class of proposed track is desired.

The 76.6 mile segment between Roll and Arlington has been out of service since 1997. The reestablishment of railroad service on the Wellton Branch would provide:

- Direct rail connection from Los Angeles to Phoenix.
- Amtrak access to Downtown Phoenix.
- Improvements towards ADOT State Rail
 Plan for passenger rail.
- Increased potential for additional freight customers along the Wellton Branch.
- Supports economic development objectives.



This study was completed considering applicable Federal and State regulations including those established through the FRA as well as UPRR design standards and practices.



ALTERNATIVE SCENARIOS

The range of alternatives considered in this study included both freight rail only and freight rail plus passenger rail options:

- 1. Through freight service only (FRA Class 2 Track), allowing a maximum speed of 25 mph for freight trains.
- Through freight and basic Amtrak service (FRA Class 3 Track), allowing a maximum operating speed of 40 mph for freight trains and 60 mph for passenger trains. Method of train control would be Track Warrant Control (TWC).
- 2A. Same as #2 but with Positive Train Control (PTC)
- Through freight and higher speed passenger service (FRA Class 4 Track), allowing a maximum operating speed of 60 mph for freight trains and 79 mph for passenger trains.

Upgrading the Wellton Branch to the various FRA Class Track listed above require incremental levels of improvement to the trackbed, structures, signal system, railroad crossings, railroad sidings and railroad geometry. In order to meet FRA requirements this line will either utilize TWC or Positive Train Control (PTC) with PTC providing a greater level of redundancy for railroad safety (ie: ability to control the train remotely in an emergency situation).



COST ANALYSIS

For each of the alternative scenarios developed for this study planning-level capital cost estimates were put together and are summarized as follows:

Alternative Scenario		Total Est. Cost	Avg. Cost/Route Mile
I	Class 2 Track	\$165.4 million	\$1.8 million
2	Class 3 Track	\$194.8 million	\$2.1 million
2A	Class 3 w/PTC	\$266.0 million	\$2.9 million
3	Class 4 Track	\$420.3 million	\$4.6 million

CONCLUSIONS

The Wellton Branch Railroad Rehabilitation Study analyzed four scenarios in order to provide an understanding of the magnitude of cost associated with each class of track and the feasibility of each scenario. A summary of key findings is provided below:

- Planning level cost estimates developed for freight and passenger rail scenarios
- Current freight demand along the Wellton Branch line/ Phoenix Subdivision does not warrant re-opening the Wellton Branch
- As freight demand increases the Wellton Branch line would be rehabilitated in phases
- Re-opening this corridor solely for passenger service is not cost effective
- Continue to identify and develop freight opportunities



Study area and study area characteristics identified for the Wellton Branch Railroad Rehabilitation Study.

