

Yuma Rail Corridor Study Preliminary List of Alternatives

Alternative #1, Produce Unit Train Service. Unit train service for Yuma and/or Mexican fresh and frozen produce is initiated to hub location(s) such as Chicago, New York, Dallas. A consolidation facility is constructed in conjunction with the rail service. The service is analogous to the RailEx service in California and Washington State or the Cold Train service in Washington State.

Likely public/private sector involvement: Public sector would help facilitate, provide rail infrastructure. Private sector would fund most of the building of the center, operate service.

Order of magnitude cost: If the cost were similar to the RailEx facility in Burbank, WA, the total cost would be around \$34 million with around \$8 million in public sector funding. The Cold Train service received about \$2 million in public sector funding, although the infrastructure used by the service at the Port of Quincy had previously received \$5.7 million in public sector funding.

Order of magnitude usage: With a schedule of 55 carloads, six days per week half the year, the total carloads would be 8,580 outbound.

Likely inconvenience to community: Depending upon location, there could be implications to highway/rail at-grade crossings. Would also need to make sure that the facility does not compete with preexisting privately funded facilities.

PROS:

- Would serve established shippers in Yuma and could improve Yuma's market share in produce. Could encourage frozen food operators to locate in Yuma.
- Could provide significant benefits to Yuma shippers

CONS

- Transit time from field to shelf for leafy greens is only seven days. Uncertain whether even a unit train service would be fast enough.
- Given transit time requirements, service would need to be frequent, and it is uncertain whether there would be enough freight to justify that frequency of service or whether the demand in any specific region would be sufficient to justify the service
- Service would need to be supported by local shippers to ensure that it is not competing against an existing, privately financed service

Alternative #2, AzMLC PC Scenario. A megaport is built at Punta Colonet, Mexico and a new "land bridge" rail line is built which joins the UP Sunset Corridor at or near Yuma. The Yuma community positions itself to be a distribution hub associated with the port.

Likely public/private sector involvement: Yuma's public sector role would be to help facilitate, maybe fund the building of an intermodal terminal, logistics hub in Yuma. Private sector or other public entities outside of Yuma would secure funding for the rail line.

Order of magnitude cost: Depending upon the size of the terminal, the cost would probably be somewhere between \$20 million and \$60 million.

Order of magnitude usage: 108,915 containers per year by 2030 from the Wilbur Smith Associates *Arizona Multimodal Logistics Complex Analysis*

Likely inconvenience to community: Depending upon location, there could be implications to highway/rail at-grade crossings. Some land would necessarily need to be condemned.

PROS:

- Because containers would probably need to be unloaded for customs inspection, it is likely that containers could be unloaded and shipped to other locations in Arizona and California, or into Yuma distribution facilities. This could generate jobs for the region.

CONS

- Even if right of way were pushed away from farm land, would still require some disruption and condemnation of property

Alternative #3, New Carload Connection to Port of Guaymas. A new rail corridor is built which leaves the Union Pacific Sunset Corridor in or near Yuma, crosses the border near San Luis II, and joins the Ferromex Calxico subdivision just east of Cd Coahuila. New multimodal facility is built on corridor in Yuma aimed at break bulk, bulk, and refrigerated cargoes. Rail line is promoted as a U.S. connection to Port of Guaymas.

Likely public/private sector involvement: Public sector would facilitate and fund the building of the new rail corridor, facilitate and potentially fund the building of the multimodal facility.

Order of magnitude cost: This project would cost somewhere in excess of \$120 million. The minimum is based upon an assumed minimum construction cost of \$1 million per mile for 55 miles, \$33 million minimum for a bridge over the Rio Grande, \$30 million minimum for a combined Port of Entry and transfer area, \$2 million for other costs. On the top end, costs could exceed \$0.6 billion.

Order of magnitude usage: If the border crossing at San Luis were to handle the same number of carloads as the border crossing at Calxico, the total would be in the neighborhood of 25,000 carloads per year. However, San Luis is a smaller crossing than Calxico. If the San Luis had the same ratio of truck/rail as Calxico, but with the current volume of traffic, the number of carloads handled per year would only be about 5,500.

Likely inconvenience to community: Depending upon location, there could be implications to highway/rail at-grade crossings. Some land would necessarily need to be condemned.

PROS

- Could provide a long-term alternate transportation option

CONS

- Cost.
- Likely usage of the rail line would make it difficult to justify on a benefit/cost basis.
- Because relatively little cross-border traffic originates or terminates in Yuma County, the project would have relatively minor economic impact on Yuma County
- Even if right of way were pushed away from farm land, would still require some disruption and condemnation of property

Alternative #4, New Intermodal Connection to Port of Guaymas. A new rail corridor is built which leaves the Union Pacific Sunset Corridor in or near Yuma, crosses the border near San Luis II, and joins the Ferromex Calxico subdivision just east of Cd Coahuila. New multimodal facility is built on corridor in Yuma aimed at containerized intermodal service. Rail line is promoted as a U.S. connection to Port of Guaymas.

Likely public/private sector involvement: Public sector would facilitate and fund the building of the new rail corridor, facilitate and potentially fund the building of the multimodal facility.

Order of magnitude cost: This project would cost somewhere in excess of \$140 million. This is based upon the cost of Alternative #3, in addition to an intermodal terminal of at least \$20 million. On the top end, costs could exceed \$0.6 billion.

Order of magnitude usage: The carload traffic would be similar to that of Alternative #4. For intermodal rail to be feasible, the volume of traffic generally must exceed a threshold level to be viable. The specific level will depend upon the carrier, but one potential scenario could be a minimum of service twice per week in each direction, 140 containers per train, 52 weeks per year, so 29,120 containers handled per year. In the short term, the volume of containers would be zero. Guaymas is poorly positioned to handle container traffic from the Far East, since it requires two additional navigation days compared to competing ports. In February, the MSC Mediterranean Shipping Company began a weekly feeder service to the port from the Port of Manzanillo. No intermodal rail service is provided to the port. Pacer Stacktrain provides intermodal service between Chicago and Hermosillo. The company had suggested expanding the service to Guaymas, but this has not yet happened.

Likely inconvenience to community: Depending upon location, there could be implications to highway/rail at-grade crossings. Some land would necessarily need to be condemned.

PROS

- Could provide a long-term alternate transportation option

CONS

- Cost
- Likely usage of the rail line would make it difficult to justify on a benefit/cost basis.

- Because relatively little cross-border traffic originates or terminates in Yuma, the project would have relatively minor economic impact on Yuma
- Even if right of way were pushed away from farm land, would still require some disruption and condemnation of property
- Intermodal rail service between Guaymas and Yuma is speculative, since Guaymas maritime intermodal service began on a very limited basis only several months ago, and no rail intermodal service is currently available at Guaymas

Alternative #5, New Logistics and Intermodal Hub in Yuma. A distribution hub is established in Wellton on the existing Wellton Branch Line, in conjunction with a new UP intermodal terminal with service between Yuma and Dallas, Chicago, etc.

Likely public/private sector involvement: Public sector role is to facilitate and potentially fund the building of the multimodal facility and spur track.

Order of magnitude cost: Intermodal terminal costing at least \$20 million, up to \$100 million.

Order of magnitude usage: As described in Alternative #4, intermodal service must generate above a threshold level of volume to be viable. The logistics hub would need to have an anchor tenant or set of anchor tenants to be viable. Volumes would be zero or in excess of 29,120 containers.

Likely inconvenience to community: Minimal.

PROS

- If this project were successful, could bring jobs and economic development to Yuma
- Relies on existing rail infrastructure
- Minimal inconvenience

CONS

- Yuma County's ability to compete as a logistics hub is speculative, given that logistics & distribution is a small portion of Yuma's economy now. Yuma has some geographic disadvantages for distribution in that it is not located within either the Southern California or the Arizona Sun Corridor megaregions.¹ Yuma County is located too far south to also serve the Northern California and Front Range megaregions. Most retail distribution centers are nation-specific, so the options for international distribution may be limited.
- Yuma County is too close to Los Angeles for UP to provide intermodal service between Yuma and the Los Angeles metropolitan region. Service would need to be between Yuma and point further east.
- Would be highly risky if terminal is built before necessary agreements are in place

¹ www.america2050.org

Alternative #6, Industrial Park/Rail Park in Wellton. A spur track is built to provide access to the Wellton Mohawk site for an industrial park. In conjunction, a short line rail carrier provides switching at site, as well as over the Sunset Corridor to shippers in Yuma. Transload and storage facilities are constructed in conjunction with the facility.

Likely public/private sector involvement: Public sector provides spur track, helps facilitate the marketing of the site.

Order of magnitude cost: Depends upon what is built, but public sector contribution would probably be limited to building rail infrastructure into the park, perhaps less than \$10 million

Order of magnitude usage: Uncertain, but unlike containerized intermodal service, there would be no minimum threshold for the facility to be viable.

Likely inconvenience to community: Minimal.

PROS

- Could bring economic development and jobs to Yuma
- Relatively little public sector investment
- Relies on existing rail infrastructure
- Minimal inconvenience

CONS

- Could be risky to invest public funds in speculation
- Would need to be better defined in terms of target industries
- Assumes that owners of the site would be interested

Alternative #7, Yuma Rail Park. Transload and storage facilities are established at UP-owned site between Redondo Drive and Arizona Ave

Likely public/private sector involvement: Public sector helps to facilitate and market the establishment of facilities.

Order of magnitude cost: Depends upon what is built, but public sector contribution would probably be less than \$5 million.

Order of magnitude usage: Uncertain, but unlike containerized intermodal service, there would be no minimum threshold for the facility to be viable.

Likely inconvenience to community: Would need to make sure that the facility does not compete with preexisting privately funded facilities.

PROS

- Could bring economic development and jobs to Yuma

- Relatively little public sector investment. Relies on existing rail infrastructure.
- Minimal inconvenience

CONS

- Would need to be better defined in terms of target industries
- Would need to ensure that project does not interfere with other privately funded operations
- Cooperation by UP and other parties is speculative