

Frequently Asked Questions

Commuter Rail

What is Commuter Rail?

Wikipedia defines commuter rail as a “passenger rail transport service between a city center, and outer suburbs and commuter towns or other locations that draw large numbers of commuters – people who travel on a daily basis.” According to the American Public Transportation Association, “more than 50% of the average daily ridership [on commuter rail] travels on the train at least three times a week.” In other words, commuter rail’s primary purpose is to provide transportation to and from work.

Is Commuter Rail the same as “light rail?”

Commuter rail or “heavy rail”, such as UTA’s FrontRunner, is sometimes confused with “light rail” such as UTA’s Trax service in Salt Lake County. Both provide workforce transportation, but light rail also has a much higher percentage of riders using the system for purposes other than work trips. Commuter rail uses the same type of rail infrastructure as freight trains and operates exclusively on dedicated rail rights-of-way. Light rail operates within a combination of dedicated rail rights-of-way and public streets. Because the purpose is to move passengers over large distances efficiently, commuter rail operates at much higher speeds than light rail. Commuter rail stations are therefore spaced much farther apart than light rail platforms. Commuter rail, light rail, and bus systems function as part of a coordinated transit system, much the same as do interstate highways, state highways, and local streets.

Why is Commuter Rail important to Brigham City and Box Elder County?

Transportation infrastructure is vital to the economic health and quality of life of any community. Public transportation is a component of transportation along with streets and highways, airports, and other transportation modes. The importance of commuter rail to Brigham City and Box Elder County is in its ability to reduce automobile dependency, provide high-quality transportation options that will meet the needs of Box Elder County commuters, and promote economic development by providing transportation linkages that will further connect Box Elder County to the greater Wasatch Front. Because commuter rail is not affected by freeway congestion, it provides a reliable and predictable means of access to important business destinations such as the Salt Lake International Airport and business services in downtown Salt Lake City. It also provides a reliable and predictable means for employees to travel to work in Box Elder County, making existing local employers more viable, and making Box Elder County a more attractive location for future industrial and office development.

What is the history of Commuter Rail in Brigham City and Box Elder County?

Brigham City has been involved in planning for commuter rail since about 1997 when Wasatch Front Regional Council began planning for the system. The initial studies of commuter rail envisioned a system operating between Brigham City and Payson, and Brigham City was an active participant in these efforts.

Mayor Christensen appointed a Transit Task Force in 2003. This task force was charged with studying transit needs in Box Elder County, and included representation from a wide range of public and private interests from Brigham City, Tremonton, Perry, Willard, Box

Elder County, and Cache County and the Utah Transit Authority. The task force's work led to funding of two studies, a transit feasibility study and a transit alternatives study.

The transit feasibility study was funded through a grant from the Utah Department of Transportation (UDOT). Under this grant, UDOT provided \$6,320 and Brigham City provided the required local match of \$1,580. The transit alternatives study was also funded under the same grant program from UDOT, and also required the same 20% local match. UDOT funded \$36,000. The local match was provided cooperatively by Box Elder County communities, with Brigham City paying \$6,500; Tremonton paying \$1,450; Perry paying \$650; and Willard paying \$425. The results of these studies laid the groundwork for current UTA services in Box Elder County, and identified commuter rail as a component of a future transit system.

In 2005 Mayor Christensen established a Commuter Rail Task Force to further study the commuter rail issue in Box Elder County. Once again, the task force included broad representation, including public and private interests from UTA, Brigham City, Perry, Willard, Box Elder County, and Cache Valley Transit District. The task force's efforts resulted in funding for a Transit Corridor Study, funded by a grant of \$225,000 secured through the efforts of Congressman Rob Bishop. The \$55,688 local match for this grant was split equally between UTA and Brigham City.

The focus of the Transit Corridor Study was a detailed analysis of the cost of bringing commuter rail to Brigham City, including operating and capital costs and ridership demand. The study analyzed travel patterns in northern Utah, and identified potential ridership based on employment and commuting patterns. It also provided estimates of the capital and operating costs of various alternatives for commuter rail service. Based on variables considered in the study, it recommended a commuter rail alternative known as a "DMU" or Diesel Multiple Unit as a short term solution, with locomotive commuter rail as a long term solution. Although the Transit Corridor Study was not intended to provide an exhaustive analysis of the station location, it identified 200 S. as the preferred site for the commuter rail station.

In 2007 a broad coalition of interest groups worked to place a ¼ cent sales tax increase on the ballot in Brigham City, Perry, and Willard. This effort was supported by the Brigham City Area Chamber of Commerce, numerous business, and civic groups. Resolutions of support for the initiative were adopted by the Brigham City and Willard City Councils. There were a number of newspaper articles, open houses, and public meetings in which these plans were discussed. The ballot initiative was approved with 63% voting in favor.

Since the 2007 election, Brigham City and UTA have worked closely to continue efforts to bring commuter rail north from Pleasant View. UTA purchased 4.48 acres at 200 S. 800 W. from Box Elder School District for the purpose of a commuter rail station. UTA continues to work on right-of-way acquisition between Ogden and Brigham City in order to construct an exclusive track for operation of FrontRunner commuter rail.

Did Brigham City include other communities in the discussion about commuter rail?

Both the Transit and Commuter Rail task forces included representation from Brigham City, Perry, Willard, Tremonton, Box Elder County, Cache Valley Transit District, UTA, community groups, and stakeholders. Brigham City has always sought to be as inclusive as possible in these efforts, recognizing that commuter rail and transit are regional issues.

What were the findings of the Transit Corridor Study?

The Transit Corridor Study made the following findings:

- I-15 between the Box Elder County/Weber County boundary and Brigham City will exceed its capacity by approximately 2020.
- Average daily ridership
 - DMU option without Willard/Perry station – 490
 - DMU option with Willard/Perry station – 520
 - Commuter rail with exclusive track – 930
- Capital costs
 - DMU option without Willard/Perry station - \$36,100,000
 - DMU option with Willard/Perry station - \$41,000,000
 - Commuter rail with exclusive track - \$81,000,000
- Annual operation and maintenance costs
 - DMU option with or without Willard/Perry station - \$800,000
 - Commuter rail with exclusive track - \$3,500,000

What were the recommendations of the Transit Corridor Study?

The Transit Corridor Study made the following recommendations:

- Short Term Recommendations:
 - Implement DMU service on UPRR tracks during AM and PM peak hours
 - Maintain existing bus service during off-peak hours
 - Two morning and two afternoon DMU service trips from Brigham City to Ogden with a stop in Pleasant View
 - DMU passengers could change to Commuter Rail in Ogden
- Long term recommendations
 - Construct a separate track parallel to existing UPRR track
 - Construct a new station to serve Perry and Willard at S.R. 315 (750 N.) in Willard, near the Flying J travel plaza
 - “Same seat service” between Salt Lake City and Brigham City

What is a “DMU?”

The Transit Corridor Study analyzes two types of commuter rail as options for service to Brigham City. These are DMU and locomotive commuter rail. DMU or Diesel Multiple Unit is defined by Wikipedia as “a multiple unit train consisting of multiple carriages powered by one or more on-board diesel engines.” DMU is distinguished from locomotive commuter rail by its smaller size, lower weight, slower speed, and lower seating capacity. By contrast, locomotive commuter rail, which is the technology currently utilized between Pleasant View and Salt Lake City, is larger and heavier, but travels faster and can carry more passengers.

Why is DMU considered only a short term solution?

The long range goal of commuter rail is “same seat service” between Brigham City and Salt Lake City or other destinations. Same seat service means that users would be able to take the train to or from their destination without the need to transfer part way through the trip. With DMU, commuters from the Brigham City and Willard/Perry stations would be required to transfer in Pleasant View or Ogden to a locomotive commuter rail train in order to continue the trip. Likewise, commuters to Box Elder County destinations would also be required to make the transfer. While UTA will make these transfers as seamless as possible, they will introduce delays making the service less attractive and functional. A DMU solution would enable service to be provided in the short term at a lower cost, but with less passenger capacity, at slower speeds, and with a transfer required. In order to accommodate the long range goal of same seat service, the system needs to

accommodate locomotive commuter rail all the way to the Brigham City and Willard/Perry stations.

Did the Transit Corridor Study consider alternative station locations?

The Transit Corridor Study considered two alternative station locations – one at 1100 S. and one at Forest Street. The location at 200 S. was chosen as the preferred site. The Forest Street location was not found feasible because of the curvature of the tracks near the historic depot. Regulations prohibit a commuter rail platform location on a curve with a radius of less than 5000 feet. The 200 S. site meets these requirements, and fulfills all other functional needs for the station location.

Why is the 200 S. site better for a commuter rail station than the 1100 S. site?

There are a number of reasons why 200 S. is a better location for a commuter rail station than 1100 S. These include:

- **Best balance of commuter rail functions and needs.** The 200 S. site balances the needs of incoming and outgoing commuters. Incoming commuters are those who are travelling to Box Elder County for work and other purposes. This component of ridership is vitally important to local employers. Outgoing commuters are those who are using the train to travel to destinations outside of Box Elder County. The 200 S. site is central to the communities that will be served by the commuter rail system. It is also adjacent to major employers including Autoliv, Storm Products, ABC Construction, Whitaker Construction, Nucor Building Systems, GEM Buildings, and Vulcraft. It is adjacent to the Forest Street corridor which over time will become a major employment center. Together with the existing employee base, this future employment base will provide much of the core inbound user population for the commuter rail system. Placing the station at 1100 S. eliminates much of the value of the commuter rail system for inbound commuters.
- **Best accessibility from Box Elder County.** Because of its location, the 200 S. site provides convenient accessibility from throughout Box Elder and Cache Counties. It has multiple access routes, whereas the 1100 S. site would have only one access route which is currently un-built. Southbound commuters from outside of Brigham City would have the ability to access the site using the S.R. 13 or Forest Street interchanges on I-15, S.R. 13, S.R. 38, and Main Street. Northbound commuters from outside of Brigham City can use Main Street, 500 W., and the 1-15 interchanges to access the 200 S. station. Commuters from within Brigham City, where the bulk of the service area population resides, have a multitude of alternatives for access to the 200 S. station site. Perry commuters will have the option of using the Brigham City station at 200 S. or the Willard/Perry station at 750 N. (S.R. 315) in Willard which is easily accessible from either I-15 or highway 89.
- **Best proximity to users.** Travel time to the station is optimized for the greatest number of users by the 200 S. site because the 200 S. location is at the approximate “center of gravity” of the existing and future population centers of Box Elder County, as well as existing and future high-employment industrial centers.
- **Best accessibility from Cache Valley.** There is a perception that the 1100 S. site has better accessibility for commuters from Cache Valley, and that travel time for these users will be less than at the 200 S. site. In reality, taking into account variables such as traffic lights, congestion, etc., travel time at posted speed limits is approximately equal from the split in Box Elder County to both the 200 S. station site and the 1000 W. line on 1100 S. When the distance from the 1000 W. intersection on 1100 S. to the actual station site is factored in, travel time to the 1100 S. alternative location would actually be approximately 1.5 minutes longer than travel time from the same point to the 200 S. station. This travel time would increase with congestion on 1100 S. Despite requests from Perry officials for support of the 1100

S. station location, Cache Valley Transit District and Logan City have chosen to remain neutral on the question of the station location.

- **Reinforces County Seat and access to public services.** The 200 S. station provides convenient access to the Box Elder County Courthouse, the First District Court, Brigham City Hall, Brigham City Community Center, Brigham City Museum, Brigham City Senior Center, Brigham City EMS Center, Box Elder High School, Box Elder County Sheriff/Jail, Rees Pioneer Park and Swimming Pool, Watkins Park, Brigham City Library, Bear River Migratory Bird Refuge, and Brigham City Post Office.
- **Complies With UTA Station Separation Guideline.** UTA's guidelines recommend a separation between stations of 5 to 6 miles. This spacing allows the train to get to speed, operate at speed, and slow down for its next stop efficiently. The Clearfield and Layton stations are separated by approximately 3.62 miles, and the Ogden and Roy stations are separated by approximately 4.18 miles. These station locations serve some situations that are particular to their communities. The remainder of the stations between Pleasant View and Salt Lake exceed the guideline and the average separation of all of the existing stations is 6.20 miles. The 1100 S. and Willard/Perry sites are separated by 4.09 miles, violating the guideline. The 200 S. and Willard/Perry sites are separated by 5.98 miles, meeting the guideline.

Shouldn't the commuter rail station be located where there will be high future growth?

There will be high future growth at both the existing station location and the proposed alternative location. The best alternative for locating a commuter rail station is at a site that balances existing needs with future growth. The American Planning Association's publication [A Framework for Transit-Oriented Development Planning](#) (PAS Memo Feb. 1996) states "the goal should not be to create TOD [Transit-Oriented Development] for the sake of individual developments or isolated areas of our communities, which will be mere aberrations within the larger auto-oriented community." Brigham City has been and continues to be a partner in the development of the project known as "Upland Square." Upland Square is a development that straddles the Brigham City/Perry boundary south of 1100 S. It will provide great benefits to the residents of both Brigham City and Perry, but it is only one development of many that will occur throughout Box Elder County in the coming years. While a commuter rail station would be of tremendous value to the Upland Square development, the 1100 S. location would not maximize the system's value for the majority of its users.

There is a common perception that Brigham City is not growing and has no room left to grow. In reality, a review of U.S. Census data indicates that between 1990 and 2000, Brigham City added more households and population than any other municipality in Box Elder County. 2006 population estimates for Box Elder County, published by the U.S. Census Bureau, also show Brigham City with the greatest increase in population of any municipality in the County. The Utah Population Estimates Committee projects that this trend will continue in coming decades, with a projected 2060 Brigham City population of 50,963.

Much of this growth will occur in portions of Brigham City that are already within the incorporated boundary of the city. However, additional growth will occur as areas north and west of the city annex in order to gain access to utilities and services. There will also be significantly more employment growth in the West Forest Street corridor and in the northwest quarter of the city. Convenience and accessibility for these areas is much greater at the 200 S. station than at 1100 S.

Doesn't the 1100 S. overpass create a barrier for commuter rail?

Between the Pleasant View and Salt Lake City FrontRunner stations, UTA had to deal with 21 overpasses. A number of these had to be significantly altered or completely reconstructed to accommodate FrontRunner. UTA is currently working on the FrontRunner route between Salt Lake City and Provo. This route involves dealing with an additional 22 overpasses and 13 underpasses. UTA is very experienced in dealing with major highway crossings which inevitably involve overpasses or underpasses. The 1100 S. overpass can be engineered to accommodate commuter rail without negatively impacting the function of 1100 S., the Union Pacific Railroad, or FrontRunner. In addition, if commuter rail is ever to be an option for areas north of Brigham City, the 1100 S. overpass will need to be addressed.

Won't the 200 S. station overload 200 S. with traffic?

200 S. is a significant existing traffic route. It is a major feeder between the 500 W., Main Street, and 600 E. arterials in Brigham City and U.S. Highway 89/91 in Box Elder Canyon. It is also the major east-west route for traffic to and from Box Elder High School as well. UDOT counted an average of 10,335 average trips per day on 200 S. Assuming that 50% of this traffic does not use the street West of Main Street, and assuming that commuter rail attracts 10% of commuter trips (currently transit accounts for approximately 1.5% of work trips) between the Box Elder County, Cache County, and Southern Idaho commutersheds, and destinations in Weber, Davis, Salt Lake, and Utah Counties, 200 S. could expect to see an additional 509 trips per day, less than 10% of existing usage. Much of this traffic could eventually be eliminated with bus service within Box Elder County and Cache County coordinated with commuter rail schedules.

Will Box Elder High School students be endangered by traffic on 200 S. between 600 W. and 800 W.?

Transit trips currently account for approximately 1.5% of work trips. However, even if FrontRunner far exceeds these rates and accounts for 10% of work trips, commuter rail related traffic on 200 S. would increase by less than 10%. In addition, the bulk of this traffic would be generated during peak early morning and evening commute periods, when students are not present. Although it is small, the risk to students is not being ignored by either Brigham City or Box Elder School District. Brigham City is studying traffic calming measures that can be instituted on 200 S. to slow traffic between 600 W. and 800 W., and Box Elder School District has been very cooperative in these efforts.

Won't delays at the Forest Street rail crossing caused by switching operations by Union Pacific Railroad interfere with commuter rail traffic?

Brigham City has been working with Union Pacific Railroad for a number of years to resolve the issue of delays at the Forest Street rail crossing. Delays are caused during UPRR switching operations in the mid-morning and mid-afternoon, which do not conflict with peak commute time, but nevertheless present an issue that needs to be resolved. As part of this effort, Brigham City closed the 300 N. crossing. Discussions continue with UPRR regarding this issue, and the City is beginning the process of exploring an overpass or switching relocation in order to provide a permanent solution. This is a long term issue, but the City recognizes and is committed to resolving this issue for the benefit of the West Forest Street corridor as well as for accessibility to the 200 S. station site.

One of the benefits of the 200 S. site, related to the Forest Street rail crossing issue is the nature of Brigham City's street network. Because the City has an interconnected street grid, there are multiple potential routes for access to the 200 S. station. There are also alternate rail crossings at 600 N. and 400 S., which over time will become more important corridors as areas west of the UPRR right of way develop. Commuters, who use the

service on a regular basis, will settle into a route that is most convenient for their needs based on their experience and location to or from which they are commuting.

Where are tax revenues generated for the operation of commuter rail?

Transit services in Utah are funded through sales taxes. In 1996, Brigham City, Perry, and Willard annexed into the Utah Transit Authority, and began collection of a ¼ cent sales tax. This revenue funds the current bus routes that serve these three cities and provide a link to the transit hub in Ogden. In 2007, an additional ¼ sales tax was approved by voters in these three cities. This additional ¼ cent sales tax is dedicated to commuter rail purposes. Utah permits a third ¼ sales tax which can be used for a variety of transportation purposes, including commuter rail. Revenues from the first two ¼ cent sales tax increments are directed to UTA. The third ¼ cent sales tax is controlled by the County Commission of the county in which it is collected.

Sales tax collections under the first ¼ cent for the three cities for fiscal years 2005 through 2007 were:

FY 2005

- Brigham City - \$467,945
- Perry City - \$177,472
- Willard City - \$23,903

FY 2006

- Brigham City - \$534,537
- Perry City - \$202,678
- Willard City - \$27,975

FY 2007

- Brigham City - \$583,230
- Perry City - \$210,739
- Willard City - \$43,650

Sales tax collections under the second ¼ cent began in FY 2008 and are not yet available on the Utah Tax Commission website. However, they would be approximately equal to the revenues under the first ¼ sales tax.

What other entities are supporting the 200 S. commuter rail station?

To date, Brigham City has received letters of support from the Brigham City Area Chamber of Commerce, Autoliv, GEM Buildings, Nucor Vulcraft Group, and Bear River City. The Box Elder County Commission and Tremonton City Council have heard presentations from both Perry City and Brigham City, and have unanimously voted to support the 200 S. station site. The Box Elder Rural Transportation Planning Organization, representing all of the entities in Box Elder County affected by transportation issues has also heard both proposals and also voted to support the 200 S. site.

How will the commuter rail station at 200 S. affect surrounding development patterns?

Real estate development patterns are influenced by a multitude of factors. Properties that have abundant services and infrastructure are more attractive for development compared with properties where these are not available. This is true of utilities such as water, sewer, and electricity. It is also true of transportation infrastructure such as highways, streets, and rail. Just as the presence or absence of sewer service has a tremendous impact on the size of building lots and density of development, the presence

of a transit station influences development of surrounding properties. This effect diminishes with distance and is referred to as "Transit-Oriented Development." Transit-oriented development is defined by the American Planning Association as "an approach to arranging land use and development in a form that encourages and facilitates the use of transit." Generally, transit-oriented development is observed to occur within ½ mile radius of a transit facility with residents within ¼ mile of a transit stop have a higher likelihood of being willing to walk to the station. Transit-oriented development, when well done, includes a mixture of uses that benefit from and support the transit use. Again, the American Planning Association states "schools, high-density residential development, and large-scale employment centers are examples of uses appropriate for these prime areas." The 200 S. station site has tremendous potential for transit-oriented development. The Transit Corridor Study included a conceptual illustration of what transit-oriented development could look like at the 200 S. site. These illustrations are only conceptual, and actual development would depend on property availability, zoning, and a host of market factors. These effects would not occur immediately, but would proceed over time as the area develops and the commuter rail service arrives. This design would also accommodate integration of commuter rail with many other transit and transportation modes such as light rail, buses, van pools, automobiles, bicycles, and walking. These illustrations also only show properties west of 800 W. and east of the rail corridor. Transit-oriented development would influence many other properties both east and west of the rail corridor.

