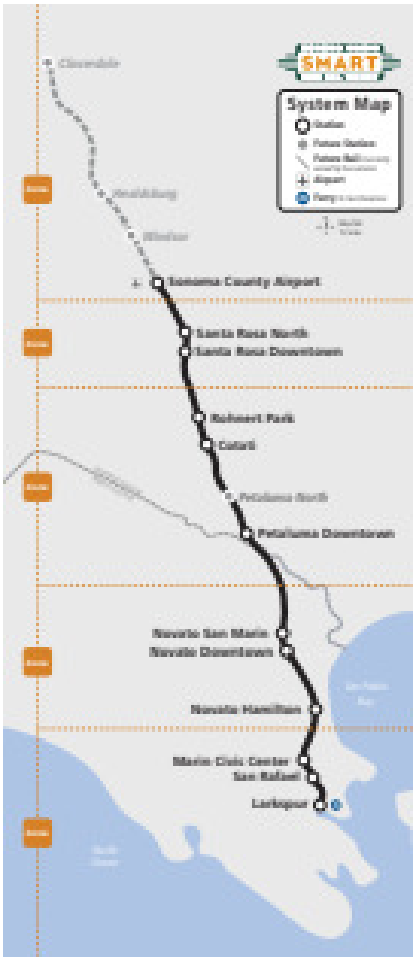
PASSENGER RAIL INFORMATION SESSION FOR NEBRASKA STATE SENATORS

Sonoma-Marin Area Rail Transit (SMART) – Prototype for Commuter Passenger Rail

Welcome senators and members of the legislative staff. Thank you for joining us to learn how better rail passenger service can improve life for the citizens of Nebraska and grow the economies of the areas you represent. My name is Jim Hanna from Columbus in Senator Moser's District 22. I am a member of the board of directors of ProRail Nebraska, and I am the Rail Passengers Association's council representative from Nebraska.

On October 18, 2019, while attending the fall conference of the Rail Passengers Association in Sacramento, California, I had the opportunity to take an optional tour to ride the Sonoma-Marin Area Rail Transit system, also called "SMART", a new commuter rail service that uses equipment that would be ideal for use on a Lincoln to Omaha route over the existing BNSF line. At the time I rode it was running from San Raphael to Santa Rosa North, a distance of 43 miles. Since then, the line has been extended south to Larkspur, where it connects with a ferry across San Francisco Bay. There are plans to extend north to Cloverdale, for a total distance of 70 miles.



(Show photo of San Raphael SMART Station)

Our group boarded the train at the San Raphael Station pictured here. Note that the platform is raised so entry to the cars is at floor level, which makes entry very quick and easy, and accommodates people with mobility issues very well. All of the SMART stations are so equipped. Departure was at late morning, so ridership was relatively low at this time.

(Show photo of SMART train at Santa Rosa Service Facility)

This photo shows a reserve train at the Santa Rosa SMART Service Facility. These trains are manufactured by the Nippon Sharyo Corporation and are known as "diesel multiple unit" or DMU trains. Unlike typical trains with one or more separate locomotives pulling some number of unpowered cars, these cars all have their own Tier 4 emission rated diesel engines. One car consists of two permanently coupled units, with control cabs at both ends. This eliminates the need to turn trains at the end of the route. The engineer just has to move to the opposite end. Multiple cars can also be coupled together to provide more passenger capacity, and still be controlled by a single operator. This picture shows a train of two cars coupled together. This system provides a high level of economy and flexibility of operation, since cars can be added for high demand times and removed when fewer passengers must be accommodated. Unlike the light rail vehicles used for dedicated transit service, these cars are fully safety qualified to operate on mixed passenger and freight tracks.

(Show photo of car interior)

Here is an interior view of a car, taken from near the operator's cabin. Seats are similar to those in commercial airplanes, but not nearly so cramped. They do have fold down tray tables. Two pairs of seats at each end of a unit are facing with a small table between. The enclosure to the left is a small snack bar where drinks and snack foods can be purchased. There is one in each unit, but during low ridership times only one of them is staffed, as riders in the connected units can move from one unit to the other through the door you see at the far end. On the right side of the car is a very spacious rest room that is fully handicapped accessible. Each unit also has hanging racks to accommodate bicycles and areas where wheelchair bound riders can ride in their chair with it safely restrained. Station announcements are done both visually on overhead displays and audibly.

Ride quality is very smooth and comfortable, and it is safe to move around the car while in motion. Carryon items can be stowed in the overhead racks or under seats. 115-volt AC power outlets are available at all seats to allow for operation and charging of electronic devices. Free WIFI service is available on all of the cars. One of the greatest advantages of commuter rail over driving is that you can get work done during your commute, or at least relax, eat and drink, talk or text on your phone, read, or otherwise occupy your time safely and productively. While on the subject of safety, I believe it is worth mentioning that, according to USDOT statistics, in 2019, the most recent year for which I was able to find information, 28,156 occupants of motor vehicles died in crashes compared to 4 who were train passengers, so diverting commuters to rail will undoubtedly save many lives.

(Show photo of Santa Rosa Station)

This is the SMART Station at downtown Santa Rosa. Not the gray stone building to the right. That was the depot for the North Western Pacific Railroad many years ago. It is now the community visitor's center and historical museum. SMART just uses a simple raised concrete platform set between the double track, which lets the same platform be used for trains moving in either direction. It has a canopy that covers a fare vending machine, seating, and informational displays. Notice that there are two sets of tracks on each side of the platform. That is because the North Western Pacific short line continues to run freight trains over this line, and the freight cars are too wide to clear the passenger platform. Freight trains are switched onto the outer track.

(Show photo of SMART maintenance facility)

Just across the tracks from the Santa Rosa Station is the SMART maintenance facility, just a modest sized building where they service and repair their 18 car sets. These cars are relatively easy to maintain as many of their components are similar to those in large trucks. Because they run on steel wheels over steel rails, they are much more fuel efficient than rubber-tired vehicles.

(Shut off photos)

Obviously, since we don't enjoy the same climate as California, our stations will have to provide some respite from our weather. The between the tracks style would be impractical on the Omaha to Lincoln route, which has too much fast-moving freight traffic for this to be safe. Existing Amtrak Stations in Omaha and Lincoln could be used with some minor additions, and they both are served by tracks that only see passenger trains. Intermediate stations would probably require a short, dedicated siding on both sides of the two main line tracks, just long enough to hold the longest commuter train that will stop there. Platforms on both sides of the track would be needed, connected by a way to cross safely from one side to the other. A shelter and ticket vending would be needed only on one side.

Fortunately, the BNSF trackage between Omaha and Lincoln is already rated for up to 79 miles per hour and is equipped with Positive Train Control, an automated safety feature required on all routes carrying passengers and certain kinds of hazardous freight. This would eliminate the largest cost by far that faced implementation of SMART, purchasing the right of way and track from the North Western Pacific and upgrading it to passenger train standards. The tracks we propose to use already host the Amtrak California Zephyr.

I would be happy to entertain any questions. Thank you for your attention.