

Prepared by Lone Star Rail District

EXHIBIT A: PROJECT PLAN

Lone Star Rail District Project Plan - LSTAR Passenger Rail Service

Lone Star Rail District (LSRD) will develop and operate a passenger rail service, LSTAR, with proposed stations as shown in the map on Exhibit A-1 plus any added alternate or skip stop stations, running primarily in the right of way of the current Union Pacific Railroad (UPRR) corridor between the Austin and San Antonio metropolitan regions. The development of this service will be accomplished through the construction and/or purchase of:

- **Track improvements** to bring initial maximum passenger train speed to 79 mph (with provisions to increase that speed incrementally to 110 mph), including but not necessarily limited to track geometry and/or condition improvements, train control system improvements, and grade crossing adjustments,
- **Curve remediation** to increase or eliminate current speed limits imposed by track curvature,
- **Additional track and related infrastructure** (bridges, turnout, switch, and train control apparatus, communications apparatus, and so forth) as guided by LSRD's joint service planning effort with UPRR, the goal of which is to identify the improvements needed to support reliable, on-time regular passenger train service while maintaining UPRR's ability to serve its customers in the corridor,
- **Stations**, including at a minimum platforms, canopies, lighting, seating, passenger information systems, ticket vending equipment (if necessary), and pedestrian bridges, and
- **Operations and Maintenance Facilities** will include the following:
 - **Maintenance shops and yards** where LSTAR locomotives and passenger coaches will be stored, inspected, maintained, cleaned, and repaired
 - **Operations Control Center** where rail system control and communication operations will be centered
 - **Maintenance of Way base** to function as headquarters and storage for engineering/infrastructure maintenance functions
 - **LSRD administrative headquarters** to provide space for management and administrative functions of the LSRD and the rail system
- **Layover facilities** at one or other or both the ends of the line, or mid-line may be needed to provide minor inspection and maintenance of rail rolling stock stored at passenger terminals, and
- **Rail Rolling Stock**, taking into account the conceptual initial service plan goal's peak equipment requirement plus a margin to account for "shopped" equipment (for inspection, maintenance, or repair). Current plans include a sufficient number of locomotives, bi-level passenger cars, and bi-level passenger/cab cars to run each of the conceptual service plans. In addition to passenger rail rolling stock, LSRD will also acquire in the same fashion **specialized track maintenance vehicles**, plus a sufficient fleet of **highway vehicles** to support operations supervision, maintenance, and transit security functions.

Under current project development plans, seven (7) stations will serve the City of Austin – **McNeil Junction, Parmer Lane (alternate/skip stop station), Braker Lane/Domain, Anderson Lane (alternate/skip stop station), 35th Street, Downtown Austin, and Slaughter Lane**. The projected station locations are planning locations only at this time, and final station locations will be determined through the National Environmental Policy Act (NEPA) process. The location of the Operations and Maintenance Facilities has not yet been finalized, but current planning does not envision these facilities being located in

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Austin or Travis County. However, final location of the facilities is subject to the results of the NEPA process and LSTAR operational needs. Track improvements, curve remediation, and additional track and related infrastructure will be built on the proposed LSTAR route through Austin; the number and magnitude of those improvements will be determined through the NEPA and final design processes. LSTAR rail rolling stock will serve Austin rail stations. Facilities, line improvements and rolling stock are also subject to available capital budget resources and contracting or purchasing requirements.

The LSTAR capital program and service levels will be commensurate respectively with the available capital and operations funding levels. The LSTAR service is planned to be built in stages - LSRD will not delay LSTAR passenger rail service initiation until the completion of the entire passenger rail project, but rather commission and operate a minimum logical service (to be analyzed during the NEPA process), while continuing to bring new segments online as they are completed. Project development may also include the phasing of improvements within a segment in order to allow the initiation of service in a timely fashion with available resources and allowing for ongoing or future development of subsequent phases within a segment toward full completion of planned improvements. It is provisionally believed by LSRD planners that the system will generally be built and put in operation from north to south, due to the likely capital investment cash flows, the higher projected ridership in the Central Texas region, and fewer construction challenges (based on conceptual engineering analyses). The schedule for initiation of project development and service provision is to be determined by the completion of the NEPA process and availability of capital funding.

Capital cost estimates are preliminary, and are based on the conceptual service development plan (discussed below). Those costs are:

	Initial Service	Base Service	Full Service
Entire Line	\$700 *	\$840 *	\$1,400 *
Austin Portion of Line	\$268 *	\$301 *	\$426 *

** All figures are in millions of dollars and are estimates of not to exceed amounts.*

It should be noted that the costs above are not additive, but cumulative totals – i.e. to go from Initial to Base Service, the incremental cost for the entire line is \$140 million (\$840 million - \$700 million). Capital cost estimates will be further refined during the NEPA process.

LSTAR service levels will be commensurate with the available funding from participating local jurisdictions (cities, counties, college districts, etc.). For planning purposes LSTAR has prepared its operations and maintenance (O&M) projections based on the following conceptual service level goals:

- Initial Service Goal –
 - 60 minute headway on peak
 - 120 minute headway off peak
 - 12 total round trips per weekday
 - Weekend and holiday service
- Base Service Goal –
 - 30 minute headway on peak
 - 60 minute headway off peak
 - 20 total round trips per weekday
 - Weekend and holiday service

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Full Service Goal –	15 minute headway on peak
	60 minute headway off peak
	28-32 total round trips per weekday (including express trips)
	Weekend and holiday service

For estimating purposes here, operations and maintenance costs have been determined for each conceptual level of service goal. The annual net O&M cost (after fares and miscellaneous revenue is accounted for) is planned to be split into thirds, with one third paid by the taxing jurisdictions in the smaller cities in the corridor, another third by the Austin/Travis County metropolitan region taxing jurisdictions, and the final third by the San Antonio/Bexar County metropolitan region taxing jurisdictions. The following table details the net O&M cost projections:

Service Level Goal:	<u>Initial Service**</u>	<u>Base Service**</u>	<u>Full Service**</u>
Smaller Cities	\$ 9.32 mil	\$ 12.60 mil	\$ 20.14 mil
Austin/Travis County Metro	\$ 9.32 mil	\$ 12.60 mil	\$ 20.14 mil
San Antonio/Bexar County Metro	<u>\$ 9.32 mil</u>	<u>\$ 12.60 mil</u>	<u>\$ 20.14 mil</u>
<i>Total</i>	\$ 27.96 mil	\$ 37.80 mil	\$ 60.42 mil

*** All numbers are current year/present value estimated amounts and are not escalated to year of expenditure.*

Further allocation of the smaller cities portion of costs to each of the smaller cities is estimated by allotting 20% of the total smaller cities costs by the number of stations (full service and split service stations) within each city and allotting the remaining 80% of total smaller cities costs by estimated city ridership activity (departures and arrivals) for the planning horizon year of the LSTAR service (2035). The following percentages (rounded to the nearest half of a percent) are the result of the smaller cities allocation and would be applied to the total smaller cities portion of total O&M costs (1/3 of the estimated total O&M costs): 1) Georgetown 16%; 2) Round Rock 28.5%; 3) Buda 4.5%; 4) Kyle 13%; 5) San Marcos 15.5%; 6) New Braunfels 13%; and 7) Schertz 9.5%.

The service levels are planning goals only. Should the actual funding support provided by the participating local jurisdictions be unable to support the planned levels of LSTAR service, the service levels actually provided will be reduced to a level commensurate with the provided local funding. All allocations are for cost estimating purposes only and may be updated over time. Actual allocations may be based upon the availability of funding from individual local government entities supporting the LSTAR service.

EXHIBIT A-1: PROJECT MAP

