# Executive Summary of SMART's Freight Rail Operations, Maintenance, Capital Costs, and Business Opportunities Analysis

Prepared by Project Finance Advisory Ltd. For Sonoma-Marin Area Rail Transit District (SMART)

#### Introduction

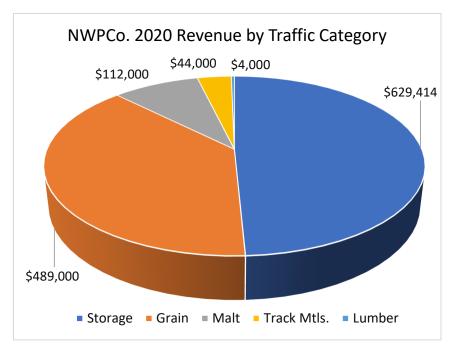
This executive summary is intended to provide SMART with an overview of key findings from the recently completed analysis of freight rail operations, maintenance, capital costs, and business opportunities. The objective of the study was to conduct a thorough and unbiased analysis of existing and potential freight rail customers within the North Bay Area and to identify the operations, maintenance, and capital costs associated with the expected and potential freight traffic. In addition, the analysis would identify the challenges, potential solutions to those challenges, and provide reasonable estimates of the freight traffic potential which the area holds.

#### **Description of Study**

The freight study provides a review and assessment of existing and potential freight rail customers in the service area, existing and potential freight traffic and revenue under various scenarios, and estimates of Operations & Maintenance (O&M) costs associated with each freight customer's traffic.

#### **NWPCo. Freight Revenue**

At present, NWPCo. is generating revenue by providing two basic services - rail transportation and storage of rail equipment. NWPCo. transports products to various customers along the line, primarily grain moving to feed mills and malt for Lagunitas Brewing, all located in the Petaluma area. NWPCo. also earns revenue by providing track space for storage of rail equipment north of Novato



and in Schellville, and for storage of empty and loaded liquid petroleum gas (LPG) cars near

Schellville. The proportion of NWPCo. revenue generated by each traffic category in 2020 is shown in the accompanying graph. The category "Track Mtls." includes materials shipped in for SMART's track construction by contractor Stacy & Witbeck.

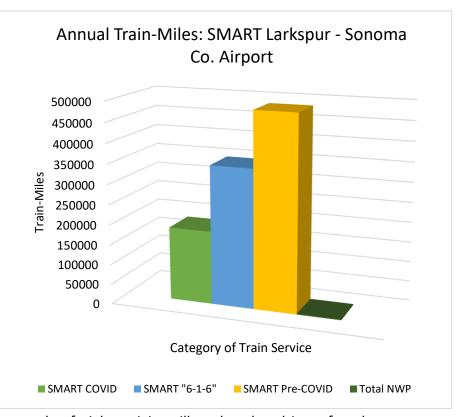
Revenue earned for moving and storing storage cars generated the largest proportion (49%) of NWPCo's revenue in 2020, followed by transportation of grain (38%). Total revenue has increased over the past five years, primarily a result of additional grain shipments going to the feed mills.

## **Estimated O&M Costs of Freight Activities**

Operations and maintenance (O&M) costs associated with the freight operation fall into two basic categories, train operations and infrastructure. Looking first at train operations, it appears there are only a few significant "out-of-pocket" or direct operating costs associated with moving freight cars to and from customers: the cost of fuel, car-hire (rental), and direct labor. Other costs are essentially fixed costs that will not vary significantly with additional traffic handled. Detailed, itemized financial records for NWPCo. were not provided so it was not possible to conduct a thorough analysis of the company's operational costs. Using estimated figures, it appears that individual cars handled for customers provide comfortable profit margins. This means that any increases in freight traffic will materially and directly improve cash-flow, while any traffic losses will notably diminish company cash-flow amounts. Additional cost detail is provided in the full report. It is recommended that all cost figures be fully verified, analyzed, and incorporated into a financial model and strategic plan.

With the necessary infrastructure already in place to facilitate movement of freight traffic, capital spending to support existing freight customers' shipments will be minimal for the life of those assets. Infrastructure maintenance spending will be driven primarily by SMART's need to keep existing track assets in safe condition for passenger operation as the various infrastructure components age. Three main infrastructure cost categories were reviewed in the study: freight switches, passenger infrastructure, and the Brazos Branch.

A **freight spur switch** that provides access to a freight customer's spur will require maintenance to ensure it functions reliably and safely. Like any physical asset, its components will wear over time and require increasing amounts of maintenance as it ages. Working with SMART's managers, life-cycle maintenance costs for main track freight switches located along the passenger corridor were developed. The fully allocated cost for maintenance of these switches is estimated to be \$5500/year in early years, increasing to an average of approximately \$8000/year after several decades of service. SMART currently has three main track switches that provide access to freight customer facilities and five additional main track or controlled siding switches that are used only by the freight operation. While various track and bridge components will be subjected to additional wear and tear because of freight operation on the passenger infrastructure, it appears those additional costs will be so minor as to be almost immaterial. Based on train-mile and ton-mile usage of the passenger infrastructure at current levels, the freight operation will account for something in the range of 1-4% of overall traffic on the line. With the freight service accounting for such a small portion of the



overall infrastructure use it appears that freight activity will not be a key driver of track maintenance spending in the future. Track maintenance spending along the passenger corridor will be driven primarily by the much higher standards required for passenger operations, with the need to provide high levels of safety and comfort for passengers. Given this, overall maintenance spending on infrastructure components along the passenger corridor in the future will be essentially unaffected by the presence of the freight service.

The "**Brazos Branch**" trackage extends eastward nearly 24 miles from Ignacio Wye through Schellville to Lombard and is currently freight-only. The current condition of track along this line is more than adequate to support the existing freight operation for many years with only minimal, routine maintenance. In terms of overall cost, by far the most significant risk factors on the Brazos Branch are related to flooding and bridges. Flooding in these low areas is common, and bridges – especially the movable structures – can require repairs involving six figure price tags. Bridges spanning navigable rivers are also subject to additional risk from collisions involving barge traffic. In previous instances funds for this kind of work have been available through state or federal programs such as FEMA and/or various grant programs. With SMART's freight trains being the sole users of this branch in the future, a significant expenditure to repair extensive flood damage or address a major bridge issue would need to be managed carefully since it would have a major impact upon the finances of the freight business.

#### **Freight Traffic Projections**

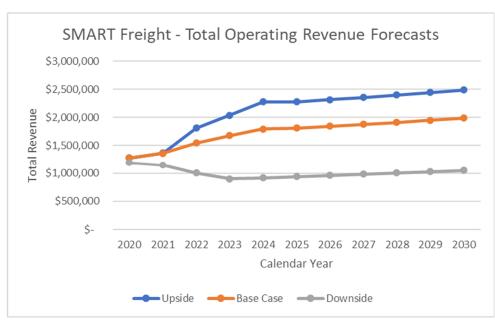
Based upon extensive research as well as numerous interviews with existing customers, potential customers, and other individuals with knowledge of freight transportation in the North Bay Area, three traffic forecast scenarios have been prepared. Additional detail on each scenario can be found in the full report. The forecasts show a divergence of revenue outcomes over the next 10 years, primarily dependent upon how SMART elects to manage its freight operation.

The **Base-Case** assumes that the freight service continues to function as it has in recent years, with essentially the same operating and commercial practices. This is essentially a "status-quo" forecast without any significant investments or changes. The slight increases in traffic shown are primarily due to additional marketing efforts and added emphasis on the car storage business, which includes use of the currently inactive main track north of Windsor. Total revenue in the base-case scenario grows from approximately \$1.3 million in 2021 to nearly \$2.0 million in 2030.

The **Downside** forecast assumes a variety of negative outcomes that would adversely affect freight traffic. Examples of potentially negative issues are: continued aggressive rate increases by railroads, an aggressive increase in user fees for SMART trackage, loss of customer-responsive service, customers charged for the cost of switches, only minimal marketing/promotional activities, restrictions to storage of hazardous tank cars, limitations on available track capacity for car storage, and land not made available for new transload facilities. Total revenue in the downside forecast is anticipated to drop slightly from approximately \$1.2 million in 2021 down to \$1.1 million in 2030.

The **Upside** forecast assumes multiple policies favorable to freight development are implemented in the future. Examples of favorable changes are: rate reductions, improvements

in service consistency and transit times, aggressive marketing/promotion of freight service, addition of freight spurs with minimal or no charge for usage, development of transload sites, prudent application of available grant funds to develop spur tracks and freight facilities, increased availability



of track capacity for car storage, SMART assisting with land acquisition needs, and SMART willing to subsidize freight by limiting fees for use of trackage. The Upside forecast projects approximately \$1.4 million in total revenue for 2021, increasing to \$2.5 million in 2030.

The accompanying graph summarizes total operating revenue (transportation and storage combined) each year for the three forecast scenarios.

### Conclusion

The study did not reveal any new traffic opportunities that are likely to increase freight volume dramatically on SMART's trackage. It appears that a well-managed freight operation would be able to grow revenue 8 percent in the short term by utilizing additional storage north of SMART's active track and 92 percent over a 10-year period predominantly by developing additional storage and transload opportunities. This potential traffic growth along with existing traffic could be handled sufficiently by a small train operating 2-3 times per week. Potential profitability and cash-flow generated by the freight operation under various scenarios can be determined through additional financial modeling of the freight business.

The amount of freight revenue generated on SMART's lines and resulting cash flow will be highly dependent upon the willingness of SMART to support and promote the freight business. By properly structuring and actively promoting the freight business, being willing to invest in facilities, soliciting and wisely applying grant funding, and providing additional track capacity for car storage, SMART could grow its freight revenue considerably from present levels. On the other hand, with restrictive policies, minimal investment, poor promotion of services, and unwillingness to host storage cars, the freight business will likely decline, providing less revenue in the future than it does today.

It is recommended that SMART develop a financial model and formulate a strategic plan to help guide future decisions. The resulting business decisions and investments will enable SMART to optimize the financial performance of its freight business and develop it to the extent possible.