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METROLINK®

Short-Range Transit Plan

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Executive Summary



EXECUTIVE SUMMARY

This Short-Range Transit Plan (SRTP) was prepared by Southern California Regional Rail Authority (SCRRA) and consultant staff in 2015. As background, the SCRRA was established by a common joint exercise of powers agreement among its five member county commissions in 1991 as a public entity separate and apart from each Member Agency “to advocate planning, design, and construction, and then to administer the operation of regional passenger rail lines serving the counties of San Bernardino, Los Angeles, Ventura, Orange, and Riverside.” As a Joint Powers Authority (JPA), much of the work of SCRRA, especially “to construct, manage, and maintain facilities and services,” is performed in consultation with and the support of the Member Agencies. This support consists of staff support, contract and financial support, policy support, and funding. Decisions to invest in infrastructure and service, therefore, depend on the consent and support of its Member Agencies. The analysis contained in this Plan is based on many elements including an assessment of the current Metrolink system and the environment in which it operates, and scenarios through which it can grow and evolve over the next five years.

While it is typical for an SRTP to indicate a commitment to a specific scenario of service levels and growth and a specific set of capital investments without implying commitments, as a JPA and as an Agency with no dedicated funding source, SCRRA relies on consultations and commitments of support from its five Member Agencies to secure investments in service and infrastructure.

The SRTP advances the SCRRA towards achieving its long-term goals identified in its Strategic Plan. The SRTP identifies the short-term challenges, provides an analysis of financial resources, proposes action plans for public transportation (specifically, commuter rail mode), and includes other project and program initiatives. In addition, it addresses future funding strategies and measures the Plan’s performance.

GOALS

SCRRA’s goals, as articulated in its Strategic Plan, emphasize a strengthening of its core functions while balancing these with customer needs and the demand for growth within the next five years.

SCRRA’s goals, at a high level, include:

1. Ensure a safe operating environment
2. Achieve fiscal sustainability
3. Invest in people and assets
4. Retain and grow ridership
5. Increase regional mobility
6. Improve communications to customers and stakeholders
7. Improve organizational efficiency

These goals serve as a means of fulfilling the Mission, Vision, and Values of the Agency. The goals that can be implemented in the short-term are the focus of this SRTP.

FOUNDATION FOR THE FUTURE

The SRTP analysis phase, supported by the Strategic Plan analysis phase, highlights the following trends and considerations:

- While the majority of the Metrolink passenger population remains white-collar workers, passengers now represent commuters from and traveling to more diverse locations, travelers during off-peak hours and reverse direction, students, and leisure travelers.
- Core service remains in the commute to downtown Los Angeles, but the market for additional service to outlying areas of the region is growing rapidly.
- Service has grown, but has now effectively reached the capacity of the system. Metrolink line capacity is constrained by operating agreements and the capacity of the existing infrastructure

- Safety remains a high priority. SCRRRA has addressed all safety themes in the expansive safety report issued five years ago except the last two, Strategic Plan and Governance. The Strategic Plan and the SCRRRA Ad Hoc Governance Committee established following the July 2014 Strategic Plan Board Workshop now address those safety themes.
- SCRRRA lacks a long-term, dedicated funding source and, therefore, has difficulty in making long-term commitments. The identified funding options would either provide a dedicated funding source at the state and/or regional level or provide added funds each year through discretionary grants.

METROLINK MOVING FORWARD

The SRTP has defined a vision for Metrolink for the next five years. It has done so in a manner that does not just look at the growth of the system, but at the fundamental functions of SCRRRA and what is needed to improve these functions in order to allow the service to grow.

Recommendations

The Plan includes a series of goals and strategies based upon the core values, which serve as a means of fulfilling the Mission and Vision of SCRRRA. Each of the strategies is presented with suggested performance metrics (**Table 12**) to help measure the progress in implementing the strategies in the short-term.

CONCLUSION

In the short-term, SCRRRA is focused on addressing goals and growth scenarios by adopting an investment strategy and taking actions with three major focus areas:

1. Strengthening core institutional functions, focused on fiscal sustainability, safety, system reliability and customer communications and responsiveness.
2. Evaluate the potential for additional reverse commute trips to address the growth balance of travel patterns in the region. Initiate discussions with host railroads on potential for reverse peak services on corridors that are governed by shared use agreements.
3. Establish strategic partnerships to tap new sources of funds, encourage rail friendly development, and enable Metrolink to better serve markets within its existing network.

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Introduction



INTRODUCTION

The 2015 Short-Range Transit Plan (SRTP) prepared by the Southern California Regional Rail Authority (SCRRA) is designed to provide a short-range blueprint for the enhancement and growth of public transportation services in Metrolink's service area through Fiscal Year (FY) 2020.

The SRTP advances the SCRRA toward achieving its long-term goals identified in its Strategic Plan. The SRTP identifies the short-term challenges, provides an analysis of financial resources, proposes action plans for public transportation (specifically, commuter rail mode), and includes other project and program initiatives. In addition, it addresses future funding strategies and measures the Plan's performance.

The primary purpose of this SRTP is to guide the growth and enhancement of service for SCRRA over the next five years. More specifically, the SRTP process:

- Highlights the mission statement, goals, objectives, and performance standards for SCRRA.
- Provides opportunities for public and key stakeholder input into the future of Metrolink throughout the region.
- Examines performance of existing service and connections and proposes enhancements to these services.
- Defines the financial and capital implications of various growth scenarios and proposed enhancements.

MISSION, VISION, AND VALUES

SCRRA's Mission, Vision, and Values are at the heart of this SRTP and are the foundation upon which SCRRA's goals and strategies are defined.

The **MISSION** of SCRRA, as proposed by the Board of Directors and refined with input from SCRRA staff is:

To provide safe, efficient, dependable, and on-time transportation service that offers outstanding customer experience, and enhances quality of life.

The **VISION** for Metrolink is:

To be Southern California's preferred transportation system built upon safety, reliability, customer service, leading-edge technology, and seamless connectivity.

The SCRRA **VALUES** are:

- **Safety:** Safety is foundational.
- **People:** Everything SCRRA does demonstrates an appreciation for quality of life, and every act values the lives of its employees, contractor co-workers, customers, and communities.
- **Quality:** SCRRA operates on best practices and principles with a continued focus on providing high quality service to its customers every day on every ride.
- **Efficiency:** As responsible stewards of public funds, SCRRA embraces innovative solutions and continuous improvement for the lowest cost and most efficient operations.
- **Growth:** SCRRA continuously seeks creative, progressive, and collaborative solutions to promote investment, develop partnerships, and increase capacity to improve the mobility of Southern Californians.

GUIDING PRINCIPLES

The Guiding Principles as approved by the Board of Directors emphasize:

- **CUSTOMER VALUE** focuses on the “value proposition” for riders and what they are getting in return for their fare.
- **FOCUS AND DISCIPLINE** refers to SCRRA’s ability to “Focus” on managing the growth in the operating costs and Member Agency subsidies, along with aging capital, new investments, and project delivery.
- **CONNECTIVITY** is how the Metrolink system fits into the regional transportation framework and connects land use and development
- **COLLABORATION** is key to SCRRA’s role as a Joint Powers Authority and is vital to implementing the Strategic Plan vision.
- **TRANSPARENCY** is how SCRRA presents information to its Member Agencies and the public, increasing trust between all stakeholders.

GOALS

SCRRA’s goals, as articulated in its Strategic Plan, emphasize a strengthening of SCRRA’s core functions while balancing these with customer needs and the demand for growth within the next five years.

SCRRA’s goals, at a high level, include:

1. Ensure a safe operating environment
2. Achieve fiscal sustainability
3. Invest in people and assets
4. Retain and grow ridership
5. Increase regional mobility
6. Improve communications to customers and stakeholders
7. Improve organizational efficiency

These goals serve as a means of fulfilling the Mission, Vision, and Values of SCRRA. The goals that can be implemented in the short-term are the focus of this SRTP.

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System Overview



SYSTEM OVERVIEW

DESCRIPTION OF SERVICE AREA

The SCRRA is the Joint Powers Authority (JPA) created by the California Legislature in 1991 to operate the Metrolink commuter rail system. Metrolink is the eighth largest commuter rail operation in the United States in terms of ridership. It is also one of the youngest, having started operations in October 1992.

During the last 23 years, Metrolink's network has grown from three routes to seven, providing service to 55 stations. The network currently includes more than 512 route miles with 165 revenue trains each weekday. Metrolink's service area appears in **Figure 1**. Expansion to 536 route miles will occur with the initiation of service in the Perris Valley corridor in early 2016.

Figure 1: Service Area Map: The Metrolink System



POPULATION PROFILE AND DEMOGRAPHIC PROJECTIONS

Service Growth

Since its beginning, Metrolink has seen an overall growth in ridership supported by an immense growth in service to support the increasing demand by the regional agencies for alternatives to the automobile. Total ridership has increased by more than 1,150 percent since 1993, though in recent years ridership

has fluctuated between nominal growth and decline (see **Figure 2**). Similarly, as illustrated in **Figure 3**, the service provided by Metrolink has increased over 1,200 percent (from 212,000 train miles annually in FY92-93 to over 2.8 million train miles in FY2014-15).

Figure 2: Ridership Growth (1993-2015)

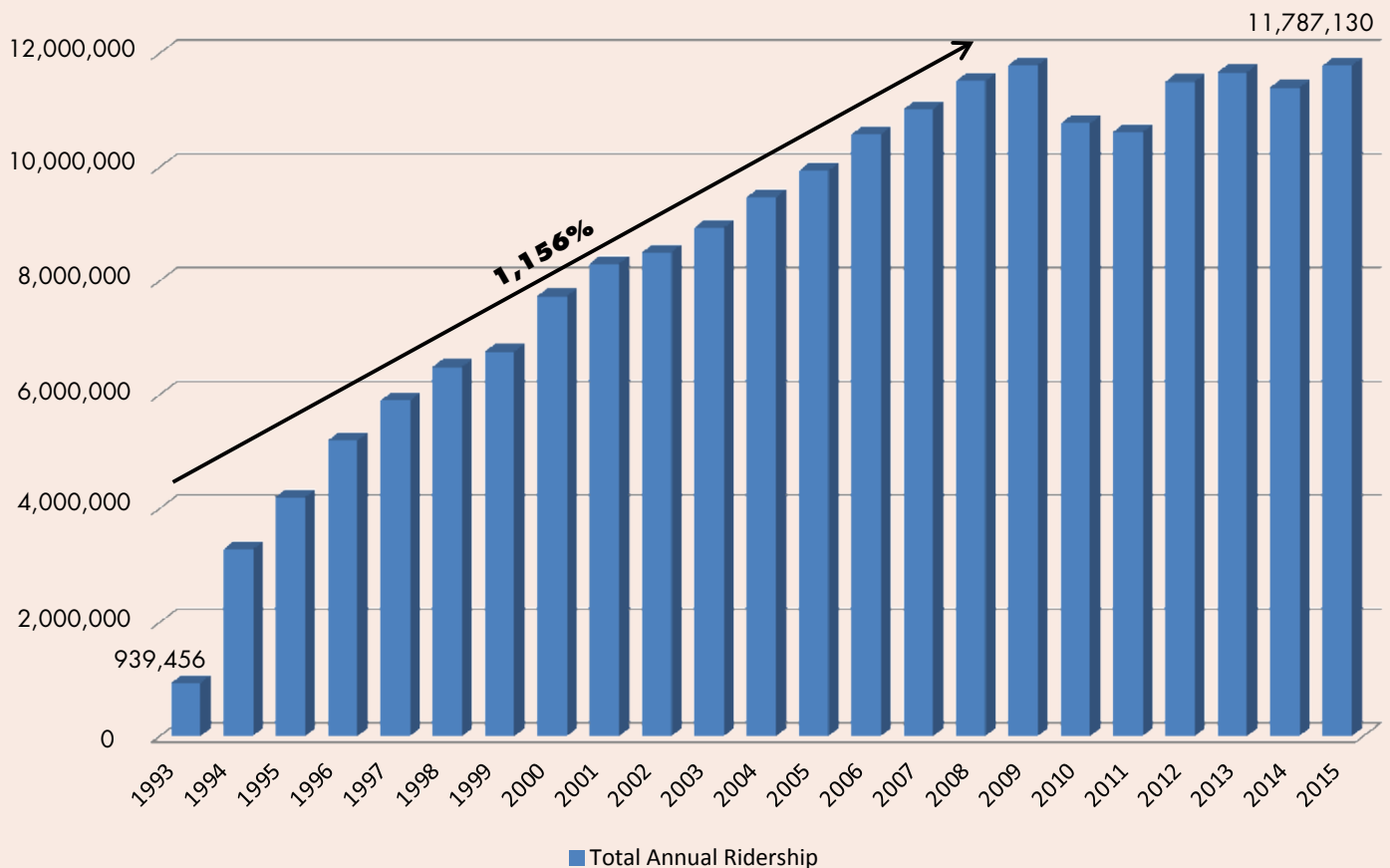
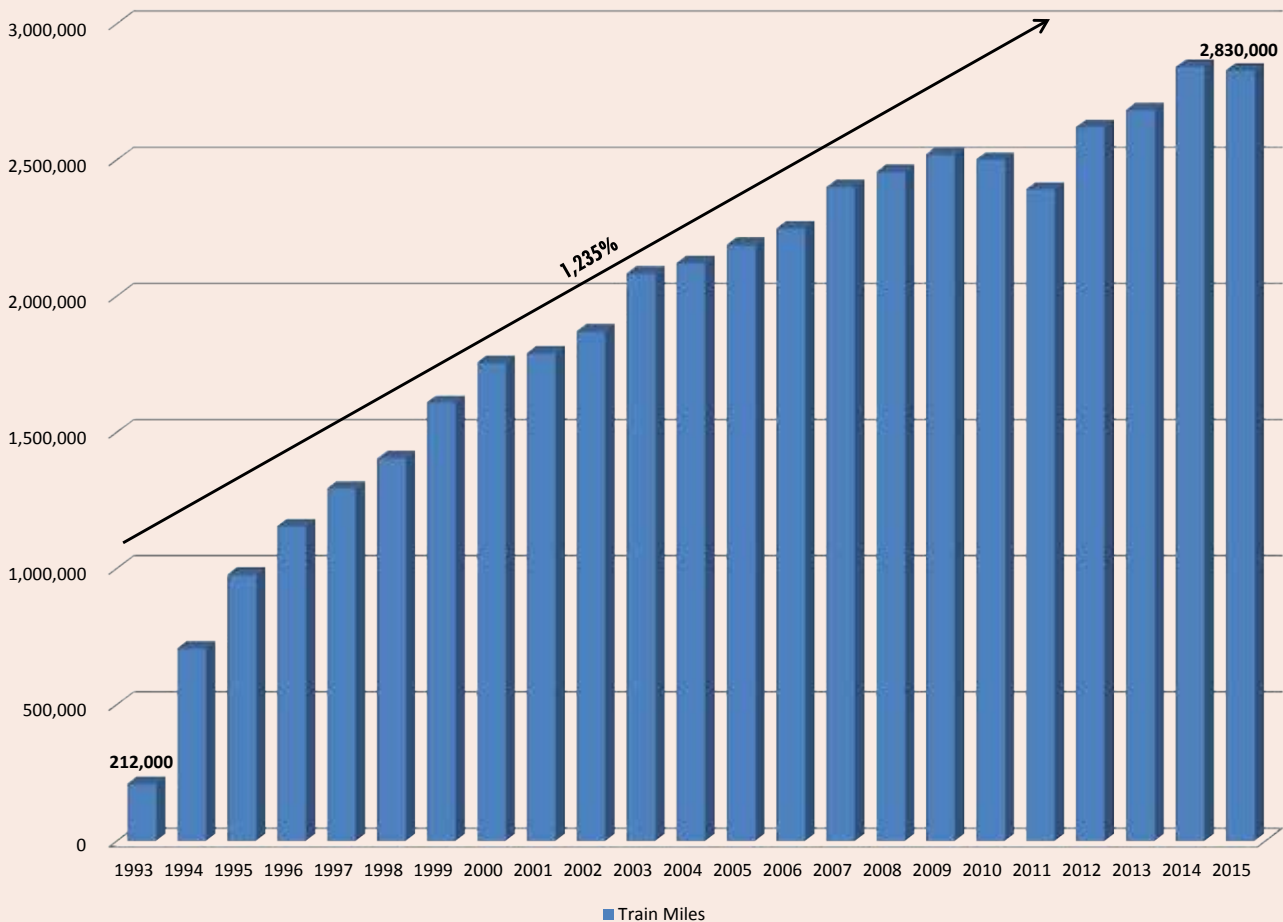


Figure 3: Growth in Annual Train Miles (1993-2015)

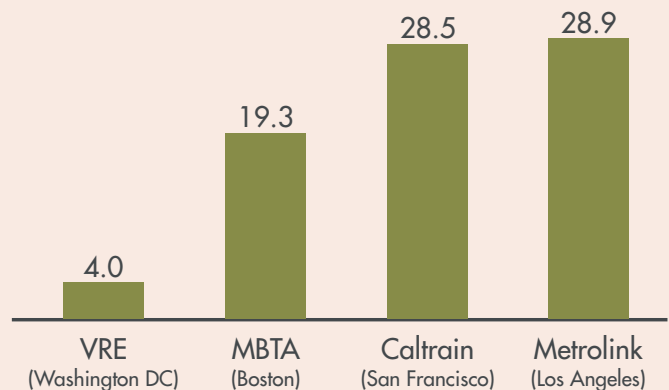


A Changing Demographic and Passenger Base

The nature of Metrolink’s passengers is changing. In 1992, when Metrolink first began operations, commuter rail passengers were predominately white-collar workers headed for a central downtown location. Today, passengers represent a more diverse set of commuters traveling to more diverse locations. Today’s commuters travel during off-peak hours and reverse direction, and are also composed of students and leisure travelers. The diversification of trip types and the income profile of the Southern California region contribute to an overall lower average income for riders than comparable systems nationwide (see Figure 4). Furthermore, the region served by Metrolink has a higher percentage of lower income households. The growing diversity of Metrolink’s passengers will demand a more flexible system that needs to address cost, schedules, and on-time

performance to accommodate the diverse passenger needs.

Figure 4: Percent Ridership by Income Class (Household’s (HHs) less than \$50K)



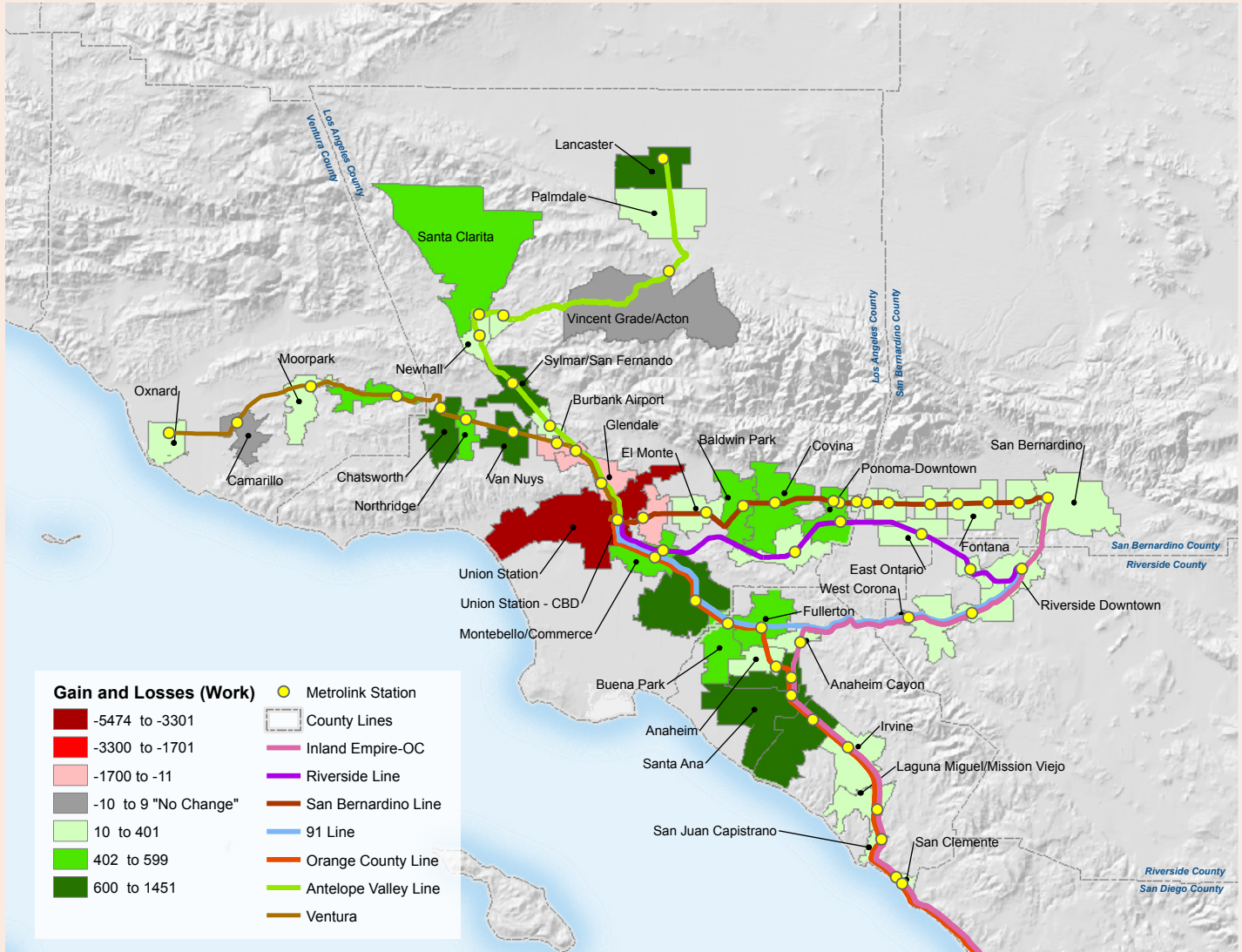
Evolving Regional Growth and Travel Patterns

Since its inception, the primary market for Metrolink has been central Los Angeles and it will continue to be a primary market over the next 10 to 20 years. However, the market for additional service to outlying areas of the region is growing rapidly. A shift in regional population and employment reflects an increase in demand to/from areas served by the Antelope Valley and Inland Empire-Orange County (IEOC) Lines as well as areas in the San Fernando Valley served by the Ventura County Line (see **Figure 5** and **Figure 6**). By comparison, decreases are projected to/from areas served by the traditional

direction Orange, Riverside, and 91 Lines.

The Antelope Valley is a notable area of projected growth, with less competition from other modes, including the automobile. The strongest demand for growth is on the IEOC Line between the Inland Empire and Orange County. These forecasts signify a transition from the traditional peak direction trips into Los Angeles in the morning and out of Los Angeles in the evening to more of a bi-directional and balanced commute pattern.

Figure 5: Net Change to Work Catchment Areas from All Home Catchment Areas (All Purposes, Commuter Rail 2010-2035)



CONNECTING TRANSIT SERVICES AND PARTNER AGENCIES

The agencies that comprise the voting members the SCRRA JPA include:

- Los Angeles County Metropolitan Transportation Authority (LA Metro)
- Orange County Transportation Authority (OCTA)
- Riverside County Transportation Commission (RCTC)
- San Bernardino Associated Governments (SANBAG)
- Ventura County Transportation Commission (VCTC)

Each Member Agency owns rights-of-way over which Metrolink commuter rail services operate. Metrolink also operates over rights-of-way owned by the freight railroads. Local jurisdictions, Caltrans, and some Member Agencies own and operate the Metrolink stations. Amtrak long-distance trains and the state-subsidized (and locally managed) Pacific Surfliner trains jointly serve several of the stations with Metrolink.

A Metrolink ticket allows for connections to neighboring networks within the region, by special arrangement with transit systems throughout Southern California.

In Los Angeles County, the EZ transit pass program allows Metrolink riders with valid Metrolink tickets unlimited free rides on participating operators' local services - any time, any day, any station, and any direction of travel. Local service includes all Metro Rail routes and stations, Metro Rapid bus, and Metro Local bus.

In September 2002, Metrolink and Amtrak introduced the Rail-2-Rail Program. As part of Rail-2-Rail, Metrolink monthly pass holders may travel on most Amtrak Pacific Surfliner trains or buses within the trip limits of their pass, at no additional charge.

CURRENT FARE STRUCTURE

Metrolink's fare structure is currently distance-based with separate fares for each station destination, rider category, fare type, and weekend or weekday travel. As a result, the ticketing system includes more than 50,000 distinct fares.

In April 2004, the SCRRA Board of Directors approved a 10-year fare restructuring program beginning July 1, 2005, which changed the Metrolink fare structure from a zone-based system to a driving mileage-based, station-to-station fare structure, which provides a fair, consistent, and equitable pricing policy. The goal is to charge customers an equitable rate for the distance traveled; the longer the distance traveled, the higher the fare.

Adjustments have been phased in to create a consistent station-to-station pricing structure after consecutive fare adjustments. This was done so that passengers travelling between certain stations would not experience abrupt increases at one time.

The fare restructuring program was completed early in 2015. Due in part to continued stagnation in ridership, a six-month pilot program was introduced on the Antelope Valley Line in July 2015. The new "Ride & Save" program will test the effectiveness of a new low price station-to-station fare in attracting additional ridership between communities along the line. This \$3 station-to-station fare and the Antelope Valley Line fare pilots continue through June 2016.

REVENUE FLEET

Metrolink is currently implementing a "Back to Basics" strategy to ensure that the basic needs of the existing service are met before any expansions are undertaken. Metrolink is currently well situated to move toward a progressive overhaul strategy with the incoming fleet of 20 new F125 locomotives and the recent purchase of 137 Guardian passenger cars. Metrolink's "Back to Basics" strategy aims to ensure that the fleet is kept in a state of good repair throughout its service life.

As reported in Metrolink's Rail Fleet Management Plan (2016), Metrolink's revenue fleet is composed of 55

locomotives and 224 passenger coaches and cab cars. All train consists are designed for push-pull operation, with a locomotive at one end and a cab car at the other. Metrolink's current daily schedule/cycle sheet, issued April 2015 requires the following in revenue operations:

- 39 locomotives
- 39 cab cars
- 152 trailer cars

Consist sizes are determined by the passenger demand on the trips served by each set, and range from four to six coaches long. Train sets are generally limited to six coaches due to regulations that would require an additional conductor be added for train sets exceeding six coaches. At the lower end, trains must be a minimum of two cars long to ensure adequate braking ability; this lower limit is always exceeded in the current operating schedule.

Metrolink's policy stipulates a maximum 95 percent load factor on all trains, meaning that train sets are sized to ensure that estimated average passenger loads fill no more than 95 percent of seats available on a train. This load factor is intended to ensure efficient use of Metrolink equipment, while providing adequate capacity for day-to-day fluctuations in actual passengers.

Metrolink has vehicles required for current operations, with a few additional vehicles (25 coaches) that are currently not service-ready, but could be rehabilitated to provide for growth. Additional vehicles are expected to be needed in the next several years for anticipated service increases and expansions. In particular, Metrolink has a very high percentage of cab cars, since extras were purchased in the recent procurement to allow for future expansion and service increases. Some of the extra cab cars are currently used as trailer cars, but are anticipated to be put into use as cab cars over the next several years. Differences in the way that the newer Guardian coach cars and cab cars are designed from the older Sentinel cars create some limitations on how the cars are used and deployed.

Metrolink currently uses some of its extra equipment as spares. The vehicles are ready to run in the case of a failure, but do not have a separate designated crew;

therefore, per Federal Railroad Administration (FRA) requirements, those vehicles are counted as spares, not as part of the peak passenger service requirement. In addition, several coaches – largely the older Sentinel cab cars that are not equipped with the latest Crash Energy Management (CEM) safety features of the Guardian cabs cars – are stored for future use (as trailers) when service increases and expansions require.

EXISTING FACILITIES AND PLANNED FACILITIES

Metrolink rolling stock maintenance is currently concentrated in one maintenance facility, the Central Maintenance Facility (CMF). A second major facility designated as the Eastern Maintenance Facility (EMF) is located about 60 miles east of Los Angeles Union Station; it is partially complete and being readied for service.

Daily inspection and servicing is also performed at six outlying yard facilities, one of which is located just north of Oceanside and is under the jurisdiction of the North County Transit District (NCTD) in San Diego County.

Additional facilities, especially in outlying areas of Metrolink service territory, such as Orange County, Riverside County, and the Antelope Valley, will be necessary as service evolves to include more frequent service (including midday and evening service).

Expansion of the layover facilities in Lancaster and Riverside is a need that has been identified. A new layover facility in Irvine is also identified on a 24-acre property near the Irvine Transportation Center owned by OCTA. A project to implement diesel exhaust fluid storage and dispensing is also in the planning stages.

Additional planned facilities include hatch storage for locomotive roof hatches, and expansion of store rooms at CMF. More detailed information about Metrolink's revenue fleet and facilities are provided in SCRR's Fleet Management Plan.

Existing Service Performance



EXISTING SERVICE PERFORMANCE

This section outlines the primary factors that impact Metrolink's system performance. Reliability and on-time performance are important metrics that relate directly to customer experiences and the ability to retain existing and attract new riders. The metrics used to measure the performance of the system in this SRTP are aligned to reflect the customer needs and experiences. In addition to on-time performance, other metrics such as tracking customer complaints are described.

KEY PERFORMANCE INDICATORS

SCRRA utilizes six primary key performance indicators to evaluate its performance against its goals. Each key performance indicator is described in greater detail below.

- Operating Costs
- Revenues and Net Subsidies
- Condition of Vehicles
- Ridership
- On-Time Performance
- Customer Experience

Operating costs

Operating costs have been growing at an annual rate of seven percent over past 10 years, increasing faster than vehicle revenue mile growth. Other costs, such as maintenance-of-way (MOW), and administration/service, only represent one third of the operating cost increases (\$9 million and \$7million respectively).

Internally controlled costs remain disciplined, although they still outpace inflation by 2.5 percent. A majority of the increase is a result of inflation, fuel prices, and risk management. Fuel costs have grown by over 300 percent in the last 10 years, with volatility in diesel prices continuing to pose risks for further cost increases. The increase in service accounts for 10 percent of overall cost increases.

With operating costs growing and growth in total operating revenue slowing over the past five years (2.4 percent per year since FY2009), member subsidies have

had to cover the gap, increasing 126 percent. Member Agency subsidies now cover nearly half of all operating costs. Some of these costs are associated with increased services initiated by member agencies, thereby requiring additional subsidies.

Revenues and Net Subsidies

In addition to member subsidies, farebox revenue provides a substantial source of funding to SCRRA and remains the primary single source of income for SCRRA. Other non-farebox revenue currently comprises a smaller share of total revenue than in previous years.

Total operating revenue (without member subsidies) is growing at a compounded annual rate of 5.9 percent per year, but is forecasted to grow just 1.7 percent per year over the next five to 10 years. Despite the projected reduction in cost growth, the gap between total operating costs and operating revenue is projected to continue to widen through Fiscal Year (FY) 2020. These subsidy levels need to be evaluated in consultation with Member Agencies to determine if desired service levels and growth is supported.

Condition of Vehicles

Mechanical delays have decreased on average from 30 train delays per month in 2013 to 21 in 2014, putting SCRRA near their performance goal. Rolling stock is spending fewer dwell days in the shop per visit. The decrease in locomotive dwell days per shop visit is driven by MP36PH and F59PH models, which have decreased from 16.7 in 2013 to 10.5 in 2014 for total locomotives. Cab/coach cars are also seeing decreased dwell time per visit in 2014 across all models. A continued decline in delays will have systemwide benefits, such as improved customer satisfaction, a decline in costs, and more efficient operations. SCRRA can leverage declined delays to exceed the goal of 20 mechanical delays or less per month. Current locomotive use is steady, but remains well below 2004 levels and has increased only marginally since 2009. Car utilization dipped significantly in 2011 due to the addition of Guardian cars. Fleet utilization is an important measure to assess rolling stock use and efficiency.

Figure 7: Reasons and Implications of Ridership Stagnation



The retirement of vehicles from SCRRRA’s fleet removes numerous vehicles requiring continual maintenance, thereby freeing up maintenance shop space and time, resulting in overall improved fleet utilization. Maintenance shops are repairing and maintaining more locomotives and cars than expected. During 2013, 79 percent of the days had more than four locomotives in the shop for periodic maintenance and 91 percent of the days had more than three locomotives in for repairs, both statistics beyond desired norms. Likewise, more cars were in the shop for maintenance or repairs in 2013 than expected. On average, 9.5 cars (more than 8) were in for maintenance and 5.1 for repairs (more than 3) in 2013. In 2013 and January-February 2014, all locomotives were below goal in miles between failures and have not increased miles between failures over time.

Ridership

SCRRRA ridership showed strong increases in the early 2000s before the recession, growing 27 percent from FY2004 to FY2008. However, it has remained relatively flat since then. The Recession likely affected ridership in FY2009 and beyond. Annually, ridership grew 2.7 percent, but despite the growth from FY2012 to FY2013, ridership has not yet fully reached pre-recession growth levels. Ridership stagnated in 2013 with service issues being a factor in two-thirds of defector decisions (Figure 7). Service quality is a key determinant

of rider loyalty.

Since 2009, gas prices have increased almost 50 percent, while ridership remained flat. SCRRRA can leverage increasing gas prices to attract new riders looking to save on transportation costs. In addition to rising gas prices, traffic patterns around Los Angeles remain congested. Congress has been receiving pressure to restore parity between transit usages and driving, giving SCRRRA an opportunity to capitalize on potential additional transit benefits to get people out of their cars.

Many lower income riders do not have access to personal vehicles and use transit as their primary means of transportation. Metrolink serves a disproportionately high level of low-income riders, given the percentage of low-income households in the region. Caltrain, express bus, and Bust Rapid Transit (BRT) services provide fares that are typically less than Metrolink’s. It will be a challenge for Metrolink to compete on price-point; therefore, Metrolink must focus on improved service, as additional competitive advantages may include convenience and customer service. In addition to lower fares, the competition also holds an advantage on trip-duration, which leaves Metrolink at a severe disadvantage when competing for riders.

On-Time Performance

The percentage of Metrolink trains delayed over time remains consistent and overall on-time performance is in-line with industry peers. However, the total number of train delays has increased in recent years (two percent per year). This equates to about five percent of all trains delayed annually.

Total delays grew 21 percent since 2005, but cancellations are up 340 percent. The total number of trains grew about 20 percent since 2005, but total delays are growing at the same rate as service. Although overall on-time performance is consistent (Figure 8), cancelled trains comprise a higher percentage of delays (Figure 9).

Figure 8: Percent of SCRRA Trains Delayed – 2005 to 2013

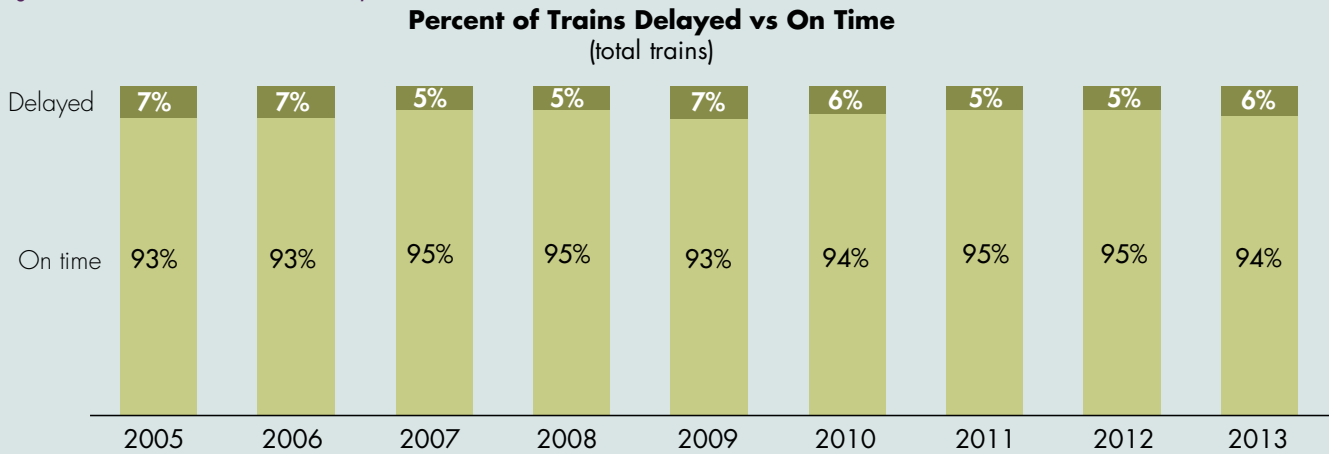
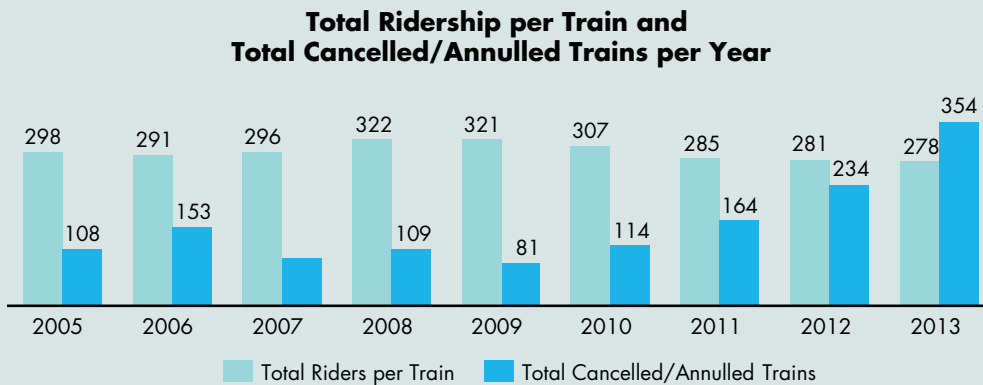
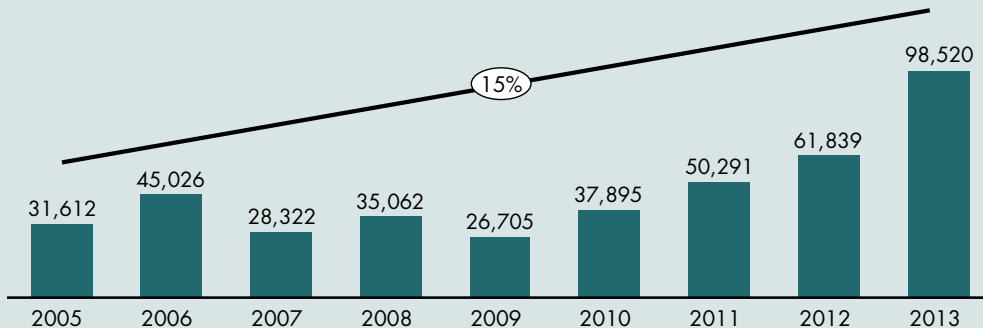


Figure 9: Number of Riders on a Cancelled Train per Year



Estimated Total Riders on Cancelled Trains



Comments

- Assuming annulled / cancelled trains average the same loads as other trains, the estimated total number of riders on cancelled trains increasing by 15% per year
- Nearly double the riders on a cancelled / annulled train in 2013 than 2011
- Amount of riders subject to cancelled/annulled trains increasing despite the riders per train decreasing since 2010
- On average, nearly 300 riders subject to cancelled/annulled trains per day

Customer Experience

Overall, SCRRA provides consistent service quality as shown by generally steady customer satisfaction ratings. Customer surveys addressing service indicate customers are currently most satisfied with conductor service, train safety, and parking availability (Table 1). In addition, SCRRA’s ability to quickly respond to and address customer complaints has been helpful in keeping customers satisfied. Top customer complaints between 2009 and 2013 were on-time performance, policies, and ticket vending machines (TVMs).

Except for on-board personnel, riders rate their experience on trains below average, with comfort and convenience being key drivers for new riders. Low ratings on many on-board service areas can threaten overall customer satisfaction with quality of service. Overall customer satisfaction has generally been steady over time implying a steady and loyal customer base. Respondents to the survey distributed as part of SCRRA’s FY2015-2024 Strategic Plan indicate several aspects of Service Quality that can be improved; for example, many of Metrolink’s peers are adding Wi-Fi Internet Access to attract and retain riders.

Table 1: Customer Survey Ratings

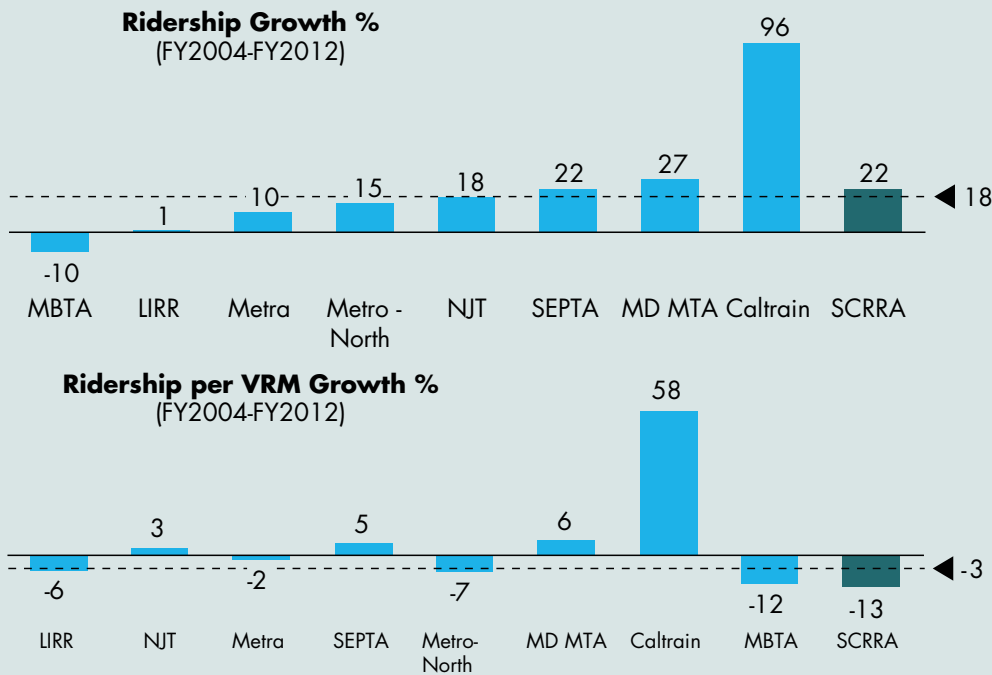
Survey Question - 2013	Rating 1-5
Helpfulness and Courtesy of Metrolink conductors	4.26
Availability of parking at station	4.16
Safe operation of trains	4.16
Feeling secure from crime while riding train	4.15
Feeling secure from crime while at station	3.90
Availability of seating on train	3.83
Cleanliness of train interior	3.81
Availability of connecting transit buses at station	3.80
Train arriving at my destination on time	3.65
Ease of using ticket vending machine	3.60
Ease of obtaining train delay information by calling 1-800-371-LINK	3.35
Average rating	3.88

PRODUCTIVITY IMPROVEMENT EFFORTS

SCRRRA ridership growth exceeds the market average, but falls below industry average in ridership per vehicle

revenue miles (VRM) (Figure 10).

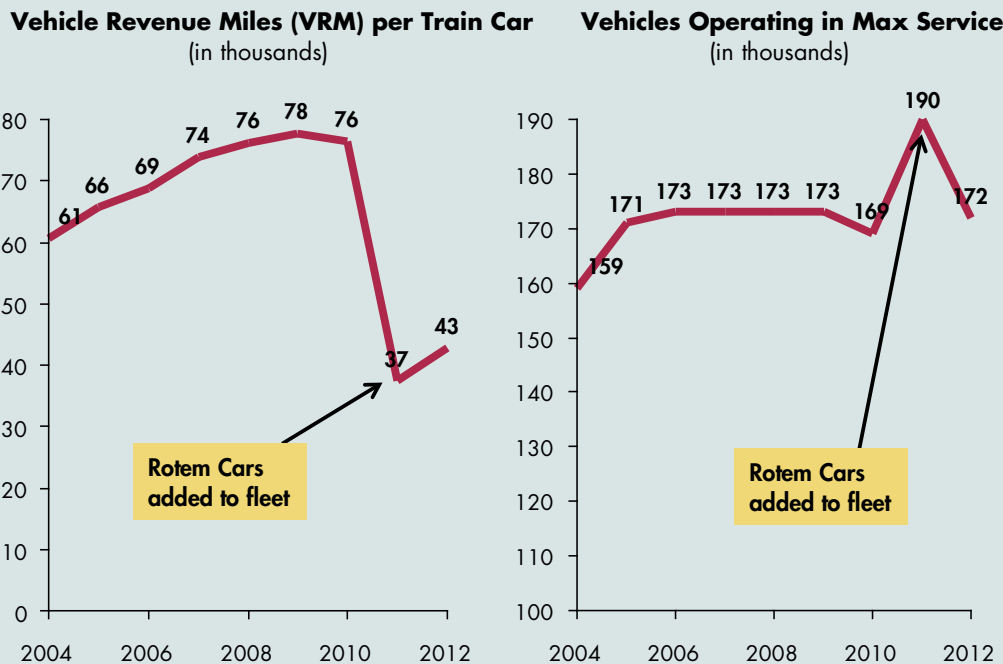
Figure 10: Ridership Growth and Ridership per VRM Growth Y2004-FY2012



Comments

- Growth measured between FY2004 and FY2012 for largest 9 commuter rail systems in the country
 - Averages do not include SCRRRA data
- SCRRRA exceeded benchmark average in ridership growth but falls well below industry average in Ridership per VRM Growth
 - About half of the benchmarks have seen decline in this metric since 2004

Figure 11: Vehicle Revenue Miles per Train Car and Vehicle Operating



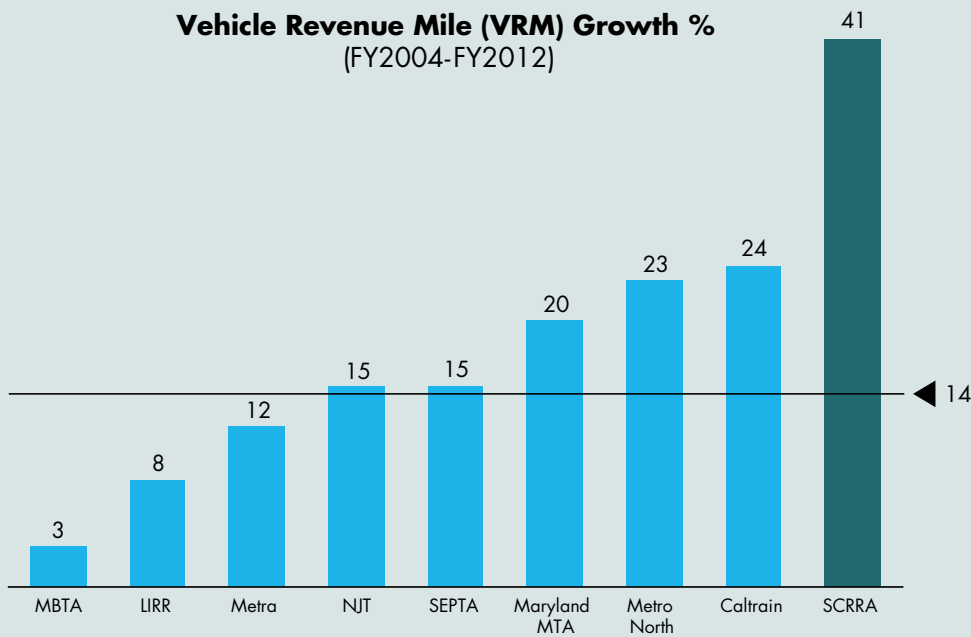
Comments

- Fleet utilization an important measure to assess rolling stock use and efficiency
- Despite small increase in 2012, VRM per train car remains well below 2004 - 2014 levels
- Vehicles operating in max service also decreased significantly from 2011 - 2012, and are now at 2004 - 2010 levels
 - After SCRRRA sells off some fleet, utilization will improve

Since FY2004, SCRRA VRM growth has nearly tripled compared to the benchmark average (Figure 12). SCRRA service (VRM) growth compares favorably to peers showing effective service regionally while continuing to

expand coverage. Ridership and VRM grew 2.7 percent and 4.4 percent respectively from FY2004 to FY2012, with most growth occurring before the recession (Figure 13).

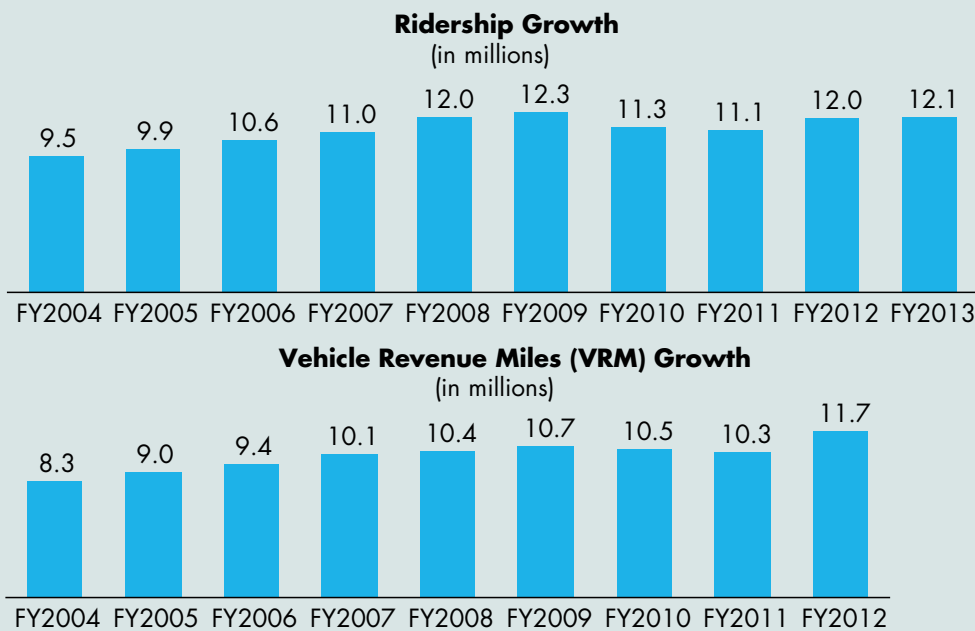
Figure 12: Percentage Growth of Vehicle Revenue Miles – FY 2004 to FY 2012



Comments

- Growth measured between FY2004 and FY2012 for largest 9 commuter rail systems in the country
 - Averages do not include SCRRA data
- SCRRA service (VRM) growth compares favorably to peers
- The service increase over time suggests the SCRRA is able to effectively serve a large region, while continuing to expand coverage

Figure 13: Ridership Growth – FY 2004 to 2013



Comments

- Annually, Ridership grew 2.7% and VRM grew 4.4% over the time period analyzed
 - However, most of this growth occurred before 2009, when the recession began
- FY2009-FY2011 are the only years in which ridership and VRM contracted, before bouncing back in FY2012
 - Despite rebound in FY2012, ridership stagnated in 2013
- Overall, figures indicate generally stronger growth in the mid-2000s

PROJECTED GROWTH OVER THE NEXT 5 YEARS

One scenario for proposed weekday and weekend service growth is shown in **Table 2** and **Table 3**. The tables present the estimated number of total daily trains on each service line in 2020, compared with 2015 service levels, which represent the No Growth scenario. This scenario was developed with input from all five Member Agencies to characterize desired growth in service over a 10-year period.

At this time, Member Agencies are at various stages and abilities to commit to specific growth levels. Given resource needs for operating subsidies and capital projects required to support service levels, Member

Agency commitments to increase service have tended to be lower than initial projections. For this reason, the scenario of growth presented in **Tables 2** and **3** shall be used as a guide for resource planning purposes and not necessarily indicative of Member Agency commitment.

Also, in general, scheduling practice is being realigned to support regular intervals between trains. For example, trains will be spaced more evenly at regular multiples or fractions of an hour (e.g., every two hours, every hour, or every half-hour). As frequencies increase, the ultimate goal will be a train every half-hour.

Table 2: Summary of Proposed Service Weekday Growth (Total Trains)

Line	No Service Growth	Weekday Proposed Service Growth
Ventura County (includes Burbank Turns)	31	35
Antelope Valley	30	34
San Bernardino	38	42
Riverside	12	16
Orange County (include OC Local)	29	33
91 / Perris Valley	9	23
Inland Empire-Orange County	16	22
TOTAL	165	205
% Growth Over No-Service	—	24%

Table 3: Summary of Proposed Service Weekend Growth (Total Trains)

Line	No Service Growth	Weekend Proposed Service Growth
Ventura County	—	—
Antelope Valley	12	14
San Bernardino (Saturday)	20	22
San Bernardino (Sunday)	14	15
Riverside	—	—
Orange County	8	9
91 / Perris Valley	4	8
Inland Empire-Orange County	4	6
TOTAL	42-48	52-59
% Growth Over No-Service	—	23%-24%

EQUIPMENT, PASSENGER AMENITIES AND FACILITY NEEDS

Asset Management Plan

SCRRA is currently in the process of preparing a Transit Asset Management Plan (TAM) that complies with Federal Transit Administration (FTA) requirements imposed in MAP-21. A section of the TAM Plan will forecast preliminary 10-year cost estimate of SCRRA's capital rehabilitation and replacement needs for the following main asset categories:

- Track – main track, siding track, including geometry: tangents and curves
- Bridges and Culverts
- Tunnels
- Revenue Vehicles – locomotives and coaches
- Non-Revenue Vehicles
- Signals and Train Control
- Other Systems – communication, fare collection, computers, servers, and routers
- Stations – station platforms, canopies, elevators, escalators, pedestrian walkways, signage, and parking lots/structures
- Facilities – maintenance facilities and (non-rolling stock) facility equipment

Using the Transit Economic Requirements Model (TERM) Lite (a high-level planning tool developed by the FTA to understand general resource needs to support State of Good Repair), the amount of annual capital expenditures required over a 10-year period was estimated to maintain or improve the State of Good Repair (SOGR) backlog or physical condition of SCRRA's infrastructure. These annual expenditure estimates are provided for major capital investment categories: (1) asset rehabilitation, (2) asset replacement, and (3) annual capital maintenance (ACM), and are further subdivided by asset type.

TERM Lite is used to determine a general estimate of capital rehabilitation/replacement needs in a financially unconstrained manner, if sufficient funding were available. Going forward, SCRRA will run constrained

model scenarios, based on funding limitations and specified prioritization and other inputs.

TERM Lite modeling for this evaluation was for 10 years reported out (FY2016 to FY2025), with FY2015 used as the base year for costing purposes. The evaluation is conducted in year of expenditure dollars. Costs provided in previous year dollars were scaled to year 2015 dollars using an annual inflation rate of 2.4 percent, and were inflated for future years using the same annual 2.4 percent inflation rate.

It should also be noted that no soft costs (i.e., project management, professional services) have been broken out for these cost estimates, meaning all soft costs are set to zero percent and unit prices are assumed to be inclusive of soft costs. Soft costs for large capital projects are assumed to be included in the total project costs. All other soft costs and related labor are assumed to not be capitalized. These preliminary assumptions regarding soft costs will be reviewed as part of the data refinement process.

As of February 2016, the working analysis for the Transit Asset Management Plan estimates a 5-year rehabilitation program need between FY2015 and FY2020 (including the backlog) of approximately \$687 million.

Table 4 presents FY2016-FY2020 of a longer-term estimate presented in **Table 11** in the 10-year Strategic Plan, 2015-2025. The TERM Lite modeling work will continue to be refined on an ongoing basis. Model inputs will continue to be evaluated, which will affect the outcome of the estimates.

Table 4: Preliminary Unconstrained 5-Year Capital Rehabilitation Cost Estimate Totals from TERM Lite* (\$ Millions)

	Backlog	FY2016	FY2017	FY2018	FY2019	FY2020	Total
Track	\$64.2	\$9.8	\$8.2	\$15.9	\$18.2	\$30.3	\$146.5
Bridges/ Culverts	\$73.3	\$3.9	\$5.9	\$17.3	\$4.7	\$2.0	\$107.1
Tunnels	\$11.0	\$1.1	\$1.1	\$1.1	\$1.1	\$1.2	\$16.6
Revenue Vehicles	\$0.0	\$13.3	\$40.9	\$0.0	\$0.0	\$0.0	\$54.2
Non-Revenue Vehicles	\$3.3	\$1.9	\$0.0	\$0.2	\$0.2	\$1.0	\$6.5
Signals & Train Control	\$47.7	\$41.9	\$7.7	\$1.5	\$1.5	\$67.4	\$167.6
Systems, Other	\$48.5	\$0.5	\$3.4	\$1.5	\$2.2	\$2.2	\$58.3
Stations	\$60.7	\$2.7	\$12.6	\$3.8	\$2.0	\$22.8	\$104.5
Facilities	\$3.9	\$3.8	\$4.1	\$3.2	\$7.1	\$4.1	\$26.2
TOTAL	\$312.5	\$78.9	\$83.8	\$44.4	\$37.0	\$131.0	\$687.6

* Revised 10-Year Capital Cost Estimates for SCRRA TAM Plan, prepared by CH2M HILL for SCRRA, dated February 24, 2016

Proposed Service Enhancements



PROPOSED SERVICE ENHANCEMENTS

Growing and retaining ridership is a key component to ensuring that SCRRRA fulfills its mission for Metrolink as a premier transportation service and the commute of choice in Southern California. This section highlights areas of service improvements as well as key components from SCRRRA's marketing plan to grow ridership and service.

Table 5 summarizes the existing rolling stock fleet requirements and the proposed service improvements. The proposed service improvements scenario reflects the service levels proposed for the year 2020 with the addition of future stations to be included in the network.

The table indicates the number of trainsets required to deliver the typical weekday service on each Metrolink branch line and estimates the total size of the fleet of diesel locomotives, cab cars, and trailer coaches required to operate the Metrolink system as a whole, assuming a 15 percent allowance for spare locomotives and cab cars and a 10 percent allowance for spare coaches to enable ongoing maintenance of the fleet.

The overall fleet growth requirements presented in Table 5 is consistent with the fleet requirements presented in the 2015 Metrolink Rail Fleet Management Plan, adopted

by the SCRRRA Board of Directors in February 2016.

Metrolink is anticipated to have sufficient fleet to meet projected growth through 2019 for locomotives, cab cars, and coach cars (trailer), assuming planned fleet purchases of locomotives are fully delivered. Furthermore, funding from Member Agencies desiring growth to support rehabilitation of cab and coach cars is also required. However, if growth continues according to projected levels beyond 2019, planning for additional locomotives and trailer cars will be necessary.

These proposed short-term service improvements require investment in additional track capacity, primarily for double-tracking portions of lines that currently have only a single track or for extending existing passing sidings. These improvements are needed to enable increases in reverse-peak and off-peak service as Metrolink transitions from a commuter system that in most corridors primarily serves one-way travel at peak periods to the Los Angeles central business district to a regional rail system offering bi-directional travel throughout the day. Several infrastructure projects have been identified for improving rail system capacity.

Table 5: Growth in Revenue Trainsets and Fleet Requirements (2020)

Line	Existing (2015)	Proposed Service Improvements (2020)	
Revenue Trainsets – Existing Metrolink Branch Lines			
Ventura County Line	4	6	
Antelope Valley Line	6	8	
San Bernardino Line	8	9	
Riverside Line	4	5	
91 / Perris Valley Line	4	5	
Orange County Line	5	8	
IEOC Line	6	6	
Stored Overnight in Los Angeles	2	0	
TOTAL	39	49	
Fleet Requirements (including 15% spare ratio for locomotives and cab cars/10% spare ratio for coaches)			TOTAL Available Today
Locomotives	45	55	55
Cab Cars	45	55	57
Coaches	179	198	176 (+25 additional in fleet, but not service-ready)

MARKETING PLANS AND PROMOTION

The marketing strategies are designed to fulfill the immediate goals of increasing revenues and ridership.

Marketing efforts need to be coordinated with all five member agencies using the agreed-upon strategic vision, strategies, and tactics. Bi-weekly meetings will occur with member agencies for marketing coordination purposes during FY2016.

Two key target audiences have been identified as growth opportunities to increase ridership and revenue:

1. Corporate Partners
2. Commuters (commuters first, discretionary travelers second)

Sub-groups exist within the two primary audiences, and strategies to reach these groups have been developed in this plan:

- Millennials (born 1977-2000) represent Metrolink's strongest growth segment. Together with Gen X, they represent about half of Metrolink's ridership and are of critical importance to Metrolink's future.
- Latinos/Asians: Marketing efforts will be translated where appropriate to garner ridership from these target populations.
- The full Marketing Plan for 2015 can be found on the Metrolink website.

Key Focus Areas

Metrolink is focusing on the following areas:

Branding

Metrolink's rolling stock and signage needs brand consistency. Currently, train consists reflect a variety of paint schemes, which undermines brand perception. SCRRA must consider and plan to bring consistency to locomotive design, passenger cars, and signage. It is estimated this would cost around \$8 million.

Connectivity

Improved connectivity with shuttle/bus/bike/car sharing will help commuters complete travel to their final destinations.

SCRRA has dedicated staff resources to tackle the ongoing challenge of providing good connections to customers. This includes communicating directly with municipal operators and member agencies on schedule changes to ensure connections are reasonable for customers. SCRRA also adopted new standards to provide customers with adequate time to transfer.

Approximately 89 percent of Metrolink riders have an automobile, so commuting by Metrolink is a choice for most. Frequent, reliable connections, specifically at the work end of a trip, are vital to the success of growing ridership. SCRRA must rely on its partners to deliver reliable connections to customers.

Technology

SCRRA is looking to utilize technology to enhance the customer experience through communications, marketing, and ticket distribution channels.

Ridership trends indicate that the Millennial generation expects enhanced technology as part of the ridership experience. To attract and grow this ridership segment, SCRRA must adopt technology enhancements.

Increase the distribution channels to sell Metrolink tickets by making tickets available online and through mobile devices through the Metrolink website and user smartphones. This approach has residual benefits of limiting the wear and tear on the Metrolink Ticket Vending Machines. The biggest challenge to implementing this program is the integration and saturation of NFC smartphone technology to allow for connections through the Metro Rail system. This strategy is actually being implemented to the public in early 2016 on some lines and will expand to the whole system and connecting bus and rail lines later in the year.

BUDGET IMPACT ON PROPOSED CHANGES

Implementing the service enhancements detailed in this section will impact SCRRA's future operating expenditures and revenues. These are highlighted in **Table 6**. A more detailed breakdown of the operating expenditures and

revenues is provided in **Table 11**. Estimates of each of the five Member Agency's net subsidy shares for the potential service scenario for the next five years is highlighted in **Table 7**.

Table 6: SCRRA Operating Expenditure and Revenues FY2016 to FY2020 (2015\$)

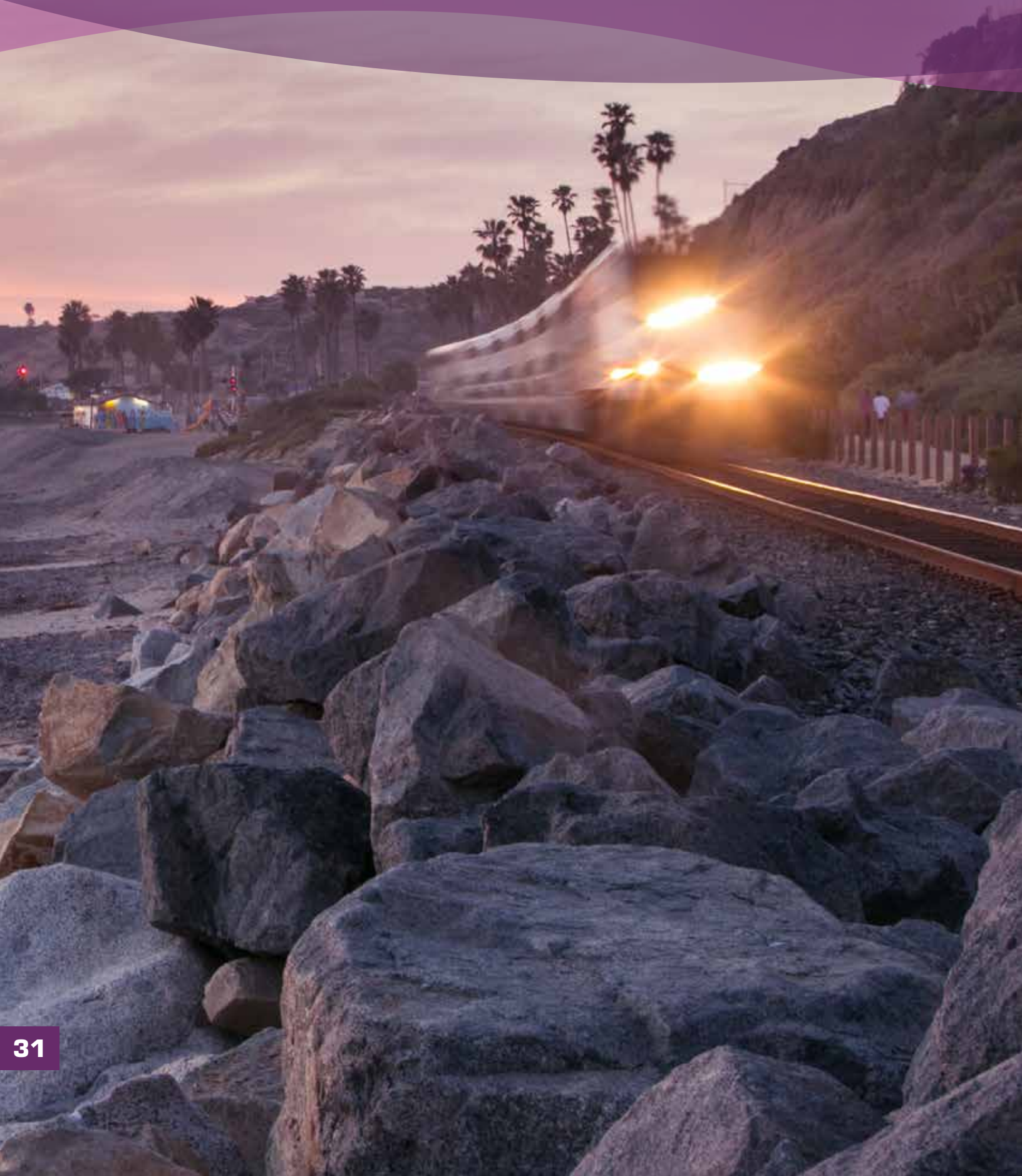
	FY16 Projected Budget	FY2017 Projected Budget	FY2018 Projected Budget	FY2019 Projected Budget	FY2020 Projected Budget
Expenditures	\$228,666,000	\$236,242,000	\$243,843,000	\$259,086,000	\$273,365,000
Revenues	\$101,749,000	\$104,650,000	\$106,121,000	\$108,594,000	\$111,131,000
Net Local Subsidy	\$126,917,000	\$131,592,000	\$137,722,000	\$150,492,000	\$162,235,000
Revenues - Total	\$228,666,000	\$236,242,000	\$243,843,000	\$259,086,000	\$273,365,000
Non-Member Agency Revenues	\$101,749,000	\$104,650,000	\$106,121,000	\$108,594,000	\$111,131,000
Farebox*	\$84,738,000	\$87,338,000	\$88,591,000	\$90,363,000	\$92,170,000
Dispatching	\$2,663,000	\$2,698,000	\$2,725,000	\$2,834,000	\$2,947,000
Other	\$0	\$0	\$0	\$0	\$0
MOW	\$14,348,000	\$14,614,000	\$14,805,000	\$15,397,000	\$16,013,000
Member Agency Net Subsidy Revenues	\$126,917,000	\$131,592,000	\$137,722,000	\$150,492,000	\$162,235,000

* Assumes fares are adjusted for inflation

Table 7: Member Agency Net Subsidy Share FY2016 to FY2020 (2015\$)

	FY16 Projected Budget	FY2017 Projected Budget	FY2018 Projected Budget	FY2019 Projected Budget	FY2020 Projected Budget
LACMTA	\$64,843,000	\$66,846,000	\$68,319,000	\$72,236,000	\$77,873,000
OCTA	\$25,832,000	\$25,855,000	\$27,668,000	\$30,098,000	\$32,447,000
RCTC	\$14,405,000	\$16,157,000	\$18,391,000	\$22,574,000	\$24,335,000
SANBAG	\$12,816,000	\$13,426,000	\$13,758,000	\$15,049,000	\$16,223,000
VCTC	\$9,021,000	\$9,310,000	\$9,585,000	\$10,534,000	\$11,356,000
Total Net Local Subsidy	\$126,917,000	\$131,594,000	\$137,721,000	\$150,492,000	\$162,235,000

Infrastructure Needs



INFRASTRUCTURE NEEDS

REHABILITATION PROJECTS AND STATE OF GOOD REPAIR

The SCRRRA three-year budget was presented to the SCRRRA Board on April 10, 2015. It included FY 2015-16 New Authority Rehabilitation Projects by Subdivision for approval and FY 2016-17 and FY 2017-18 New Authority Rehabilitation Projects by Subdivision for information, with total costs and splits between Member Agencies identified. The total costs are presented in **Table 8**.

The types of rehabilitation projects include:

- Wayside Communication
- Wayside Signals
- Track
- Rail grinding
- Structures
- Facilities
- Fleet

- Rolling Stock overhaul/upgrade
- Locomotive overhaul/upgrade
- Grade Crossing rehabilitation
- Highway/rail crossing
- State of Good Repair design engineering
- Bridge replacement
- Culvert replacement
- Ties rehabilitation and replacement at this stage of data collection related to asset values and asset conditions

The estimated average cost per year of rehabilitation needs to maintain to FTA's definition of "good" condition for all assets is approximately \$75 million per year going forward. Values different from this general amount may result in impacts to the overall condition of regional assets.

Table 8: Three-Year Budget Total Cost

Fiscal Year	Amounts
FY 2015-16 New Costs, constrained	\$75,006,000
Carryovers	\$59,889,000
FY 2015-16 Total Costs	\$134,895,000
FY 2016-17 New Costs, constrained	\$41,121,000
PH-R Locomotive Rehab	\$17,600,000
FY 2016-17 Total Costs	\$58,721,000
FY 2017-18 New Costs, constrained	\$78,358,000
PH-R Locomotive Rehab	\$13,200,000
FY 2017-18 Total Costs	\$91,558,000

CAPITAL PROJECTS

Enhancing the physical infrastructure focuses on expanding the track and station capacity to allow additional and more frequent service and improve on-time performance. Capital projects will provide additional track capacity, primarily for segments of lines that currently have only a single track, or for extending existing passing sidings. These projects are proposed to address the reverse-peak and off-peak service as Metrolink transitions from a commuter system, which in most corridors primarily serves one-way travel at peak periods to the Los Angeles central business district, to a more balanced regional rail system offering bi-directional

travel throughout the day. Several infrastructure projects have been identified for improving rail system capacity and necessary to accommodate the growth contemplated in the growth scenarios in both this SRTP and the Strategic Plan. These are listed in **Table 9** and include projects previously-identified by Member Agencies as well as a limited number of additional locations where the need for portions of second main track were identified during the evaluation of developing train schedules. Coordination with local jurisdictions and host railroads would be essential toward advancing these capital improvements.

Table 9: Short-Range Track Capacity Investment Projects

County(s)	Project	Line(s)	Description
Los Angeles	CP Raymer to CP Bernson Double Track	VCL	Construct 6.4 miles of mainline track and construct a second side platform and a pedestrian underpass at Northridge.
Los Angeles	CP Brighton to CP Roxford Double Track	AVL	Adding a second track to the AVL line segment where the IOS will be located.
Los Angeles	Santa Clarita to Newhall Double Track	AVL	Includes four grade crossings and Santa Clarita platform
Los Angeles	CP Coyote Creek to CP Valley View Third Track (BNSF)	OCL / PVL	Complete remaining 1.2 miles of triple track on the BNSF between Fullerton Junction and CP Soto in Los Angeles.
Orange / Riverside	CP Fullerton Junction to CP West Riverside Third Track (BNSF)	OCL / PVL	Complete triple track along BNSF San Bernardino Subdivision consistent with Stage 6 of the Shared-Use Agreement
Riverside / San Bernardino	CP West Riverside to CP Rana Third Track (BNSF)	IEOC	Complete triple track along BNSF San Bernardino Subdivision consistent with Stage 5 of the Shared-Use Agreement
San Bernardino	CP Lilac to CP Rancho Double Track*	SBL	Three mile double track on the San Gabriel Subdivision from CP Lilac to CP Rancho.
San Bernardino	CP Central to CP Archibald Double Track*	SBL	5.5 mile double track on San Gabriel Subdivision from CP Central to CP Archibald
Los Angeles	CP Amar to CP Irwin Double Track	SBL	
San Diego	CP San Onofre to CP Pulgas Double Track (Stage 2)	OCL / IEOC	Stage 2 of this project include the construction of a 1.6 mile segment of track

* Project priority is subject to change depending on the service plan proposed and level of express service assumed in the service plan

NOTE: Capacity improvement priorities are also subject to funding availability and Member Agency input.

As the hypothetical future train schedules were developed, the locations where trains running in opposite directions need to pass each other, or meet, were identified. These locations require a 2-track main line or a passing siding if the main line has only a single track. Wherever possible, the train schedules were adjusted to provide meets at existing sidings or double-track locations. Where this was impossible, meets were scheduled at the locations of potential infrastructure projects. By adopting regular schedule patterns, it was possible in most cases to concentrate multiple meets at the same locations.

Financial and Capital Plans



FINANCIAL AND CAPITAL PLANS

Table 10 presents the locations of infrastructure projects where multiple meets occur and where extending double tracking, or lengthening, or constructing sidings is

essential to the operational feasibility of the service plan of Growth Scenario 1.

Table 10: Short-Range Track Capacity Improvement Cost Estimates (2014 \$)

County(s)	Project	Line(s)	Cost Estimate
Los Angeles	CP Raymer to CP Bernson Double Track	VCL	\$88,000,000
Los Angeles	CP Brighton to CP Roxford Double Track	AVL	\$108,000,000
Los Angeles	Santa Clarita to Newhall Double Track	AVL	\$40,200,000
Los Angeles	CP Coyote Creek to CP Valley View Third Track (BNSF)	OCL / 91L	\$120,000,000*
Orange / Riverside	CP Fullerton Junction to CP West Riverside Third Track (BNSF)	IEOC / 91L	\$90,100,000
Riverside / San Bernardino	CP West Riverside to CP Rana Third Track (BNSF)	IEOC	\$29,600,000
San Bernardino	CP Lilac to CP Rancho Double Track	SBL	\$60,500,000
San Bernardino	CP Central to CP Archibald Double Track	SBL	\$97,300,000
Los Angeles	CP Amar to CP Irwin Double Track	SBL	\$91,650,000
San Diego	CP San Onofre to CP Pulgas Double Track (Stage 2)	OCL	\$36,000,000

OPERATING AND CAPITAL BUDGET

Table 11 illustrates a detailed breakdown of SCRRA's expenditures and revenues across the next five years,

by both revenue and expenditure type associated with Growth Scenario 1.

Table 11: SCRRA Operating Expenditure and Revenues FY2016 to FY2020 (\$000)

	FY16 Projected Budget	FY2017 Projected Budget	FY2018 Projected Budget	FY2019 Projected Budget	FY2020 Projected Budget
Expenditures	\$228,666	\$236,242	\$243,843	\$259,086	\$273,365
Revenues	\$101,749	\$104,650	\$106,121	\$108,594	\$111,131
Net Local Subsidy	\$126,917	\$131,592	\$137,722	\$150,492	\$162,235
Revenues - Total	\$228,666	\$236,242	\$243,843	\$259,086	\$273,365
Non-Member Agency Revenues	\$101,749	\$104,650	\$106,121	\$108,594	\$111,131
Farebox*	\$84,738	\$87,338	\$88,591	\$90,363	\$92,170
Dispatching	\$2,663	\$2,698	\$2,725	\$2,834	\$2,947
Other	\$0	\$0	\$0	\$0	\$0
MOW	\$14,348	\$14,614	\$14,805	\$15,397	\$16,013
Member Agency Net Subsidy Revenues	\$126,917	\$131,592	\$137,722	\$150,492	\$162,235

	FY16 Projected Budget	FY2017 Projected Budget	FY2018 Projected Budget	FY2019 Projected Budget	FY2020 Projected Budget
Expenditures - Total	\$228,666	\$236,242	\$243,843	\$259,086	\$273,365
Operations & Services	\$134,934	\$139,410	\$145,308	\$157,485	\$168,595
Train Operations	\$43,414	\$45,087	\$48,068	\$51,898	\$55,100
Equipment Maintenance	\$29,455	\$29,811	\$30,816	\$33,518	\$35,741
Fuel	\$23,076	\$23,833	\$24,125	\$27,687	\$30,454
Non-Scheduled Rolling Stock Repairs	\$232	\$232	\$232	\$232	\$232
Operating Facilities Maintenance	\$1,182	\$1,321	\$1,330	\$1,370	\$1,411
Other Operating Train Services	\$567	\$595	\$634	\$666	\$699
Rolling Stock Lease	\$640	\$250	\$250	\$250	\$250
Security - Sheriff	\$5,591	\$5,758	\$5,931	\$6,109	\$6,292
Security - Guards	\$2,010	\$2,070	\$2,132	\$2,196	\$2,262
Supplemental Additional Security	\$690	\$690	\$700	\$714	\$728
Public Safety Program	\$260	\$254	\$254	\$259	\$264
Passenger Relations	\$1,885	\$1,844	\$1,846	\$1,864	\$1,883
Holiday Trains	\$0	\$0	\$0	\$0	\$0
TVM Maintenance/Revenue Collection	\$6,703	\$7,043	\$7,363	\$7,731	\$8,118
Marketing	\$1,020	\$944	\$944	\$963	\$982
Media & External Communications	\$426	\$426	\$426	\$430	\$435
Utilities/Leases	\$2,677	\$2,766	\$2,872	\$2,987	\$3,106
Transfers to Other Operators	\$7,411	\$7,782	\$8,171	\$8,580	\$9,009
Amtrak Transfers	\$1,400	\$1,700	\$2,000	\$2,200	\$2,420
Station Maintenance	\$1,464	\$2,006	\$2,012	\$2,072	\$2,135
Rail Agreements	\$4,831	\$4,998	\$5,202	\$5,759	\$7,075
Maintenance-of-Way	\$42,774	\$44,707	\$46,009	\$47,849	\$49,763
M of W - Line Segments	\$41,546	\$43,426	\$44,686	\$46,473	\$48,332
M of W - Extraordinary	\$1,228	\$1,281	\$1,323	\$1,376	\$1,431
Risk Management	\$18,078	\$18,299	\$18,009	\$18,369	\$18,737
Liability/Property/Auto	\$12,880	\$13,524	\$14,201	\$14,485	\$14,775
Claims	\$4,000	\$3,500	\$2,500	\$2,550	\$2,601
Claims Administration	\$1,198	\$1,275	\$1,308	\$1,334	\$1,361

	FY16 Projected Budget	FY2017 Projected Budget	FY2018 Projected Budget	FY2019 Projected Budget	FY2020 Projected Budget
Administration & Services	\$32,379	\$33,310	\$33,985	\$34,835	\$35,705
Wages & Fringe Benefits	\$11,328	\$11,687	\$11,975	\$12,274	\$12,581
Non-Labor Expenses	\$4,760	\$4,940	\$4,985	\$5,110	\$5,237
Indirect Administrative Expenses	\$13,621	\$13,936	\$14,245	\$14,601	\$14,966
Professional Services	\$2,670	\$2,747	\$2,780	\$2,850	\$2,921
Contingency (Non-Train Ops)	\$501	\$516	\$532	\$548	\$564

FUNDING PLAN TO SUPPORT PROPOSED OPERATING AND CAPITAL

In addition to funds from grants, the Metrolink voting Member Agencies contribute the funds necessary to fund the SCRRA, consistent with the Authority’s adopted budget and any cost sharing formula adopted by the voting Member Agencies.

The following is how the various Metrolink project types are funded:

- Operations – 100 percent Local funds split among the Member Agencies by a funding formula that determines each Member Agency’s contribution.
- Rehabilitation – Various fund types with the funding splits by Member Agency determined by various formulas, including an “All Share” formula for elements deemed to be of systemwide value. Types of funding used include:
 - Metro – Local Funds
 - OCTA/SANBAG/RCTC/VCTC – FTA
 - Other funds may be available depending on project type
 - New Capital
 - Funding depends on project type and location and fund availability

Metrolink receives three main types of State funding for capital projects:

- PTMISEA (Prop 1B)

- Programmed to PTC, Sealed Corridor and Rehabilitation
- High-Speed Rail Connectivity (Prop 1A)
- Programmed to PTC, Locomotives and Rail Car Rehab
- Transit Security Grant Funds
 - Programmed to PTC, Rotem Cars, Sealed Corridor and Rehabilitation

In general, most of these funding sources for both operating and capital expenses are constrained. The ability and willingness of Member Agencies to commit to any portion of the estimated growth varies. Therefore, the estimates presented within this SRTP require either expansion of the existing funding sources or supplementation from other funding sources.

For operating support, some Member Agencies have indicated their operating funds are limited. Unless other funding is identified, this may suggest that expansion of service within particular counties may be less than requested.

For capital support, local sources are also similarly constrained. Remaining State funding is already programmed, and there are limited future allocations available.

Opportunities for new funding for capital projects under consideration but not yet approved include:

- Federal
 - Tiger Grants
 - TIFIA Loans
 - Core Capacity Grants
 - Formula Funds preventative maintenance and capital
- State
 - Cap and Trade Funding
 - Proposition 1A (High-Speed Rail Funding)
 - Other State Funding from Mass Transit Account
- Regional Funding
 - Potential dedicated new sales tax measure for Metrolink and other regional improvements
- Local Funding
 - Dedicated multiyear funding from Member Agencies
 - Value Capture funding through Cities/Member Agencies

REGULATORY AND COMPLIANCE REQUIREMENTS

The SCRRRA is governed by Government Code Section 6500 et seq., also known as the Joint Exercise of Powers Act and PUC Section 130255.

As a commuter railroad, Metrolink must follow Federal Railroad Administration safety and operations rules and regulations.

Per the JPA, In addition to funds from grants "the voting Member Agencies shall contribute the funds necessary to carry out the purposes and powers of the Authority, consistent with the Authority's adopted budget and any cost sharing formula adopted by the voting Member Agencies."

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Measuring Performance



MEASURING PERFORMANCE

Measuring performance is a critical step in ensuring that SCRRA advances its vision and mission. A series of strategies and metrics that align with the SCRRA’s guiding principles and the Agency’s seven goals, outlined in the Introduction, are illustrated in **Table 12**. Once a strategy is implemented, it will be monitored and measured.

Based on its duration and outcome, the strategy may be refined or closed out. Results for multi-year goals will be reported and the goal or strategy for addressing the goal will be refined, adjusted, or changed for the next fiscal year. Typically, it takes at least one-year to measure strategy results; therefore, the Strategic Plan will be updated every two years.

Table 12: Goals, Strategies and Metrics

Goals and Strategies	Measureable Outcome (Performance Measurements)
Goal 1: Ensure a Safe Operating Environment	
Strategy A: Maintain Sufficient Oversight of Operations	<ul style="list-style-type: none"> Determine appropriate level of SCRRA staff oversight of operating contracts and maintain that level of staffing
Strategy B: Reduce Operating Rule Violations	<ul style="list-style-type: none"> Reduced number and type of operating rule violations
Strategy C: Reduce Train Accidents	<ul style="list-style-type: none"> Reduced number and severity of train accidents Completed root cause analyses on all train accidents Increased number of grade crossing improvements
Strategy D: Reduce Employee Injuries	<ul style="list-style-type: none"> Decreased number and severity of employee injuries
Strategy E: Continue to Update the Metrolink System Safety Program Plan	<ul style="list-style-type: none"> Updated System Safety Program Plan Increased customer satisfaction with perception of safety and security Developed safety goals and measurements
Goal 2: Achieve Fiscal Sustainability	
Strategy A: Increase Fare Revenues <ul style="list-style-type: none"> Sub-Strategy: Reduce fare evasion rate Sub-Strategy: Increase ticket sales 	<ul style="list-style-type: none"> Reduced fare evasion rate Increased ticket sales
Strategy B: Increase Non-Fare Revenues	<ul style="list-style-type: none"> Increased non-fare revenues such as advertising, grants, and potential local sales tax increases for both operating support and capital investment
Strategy C: Implement a consistent and repetitive fare enforcement action plan	<ul style="list-style-type: none"> Percent of passengers inspected Adoption of Action Plan by SCRRA Board within fiscal year
Strategy D: Reduce Cost Per Vehicle Revenue Mile (VRM)	<ul style="list-style-type: none"> Reduced VRM cost
Strategy E: Reduce Operating Contractor Costs <ul style="list-style-type: none"> Renegotiate operating contracts with more favorable provisions for SCRRA 	<ul style="list-style-type: none"> Reduced Contractor costs Improved operating contract provisions either through amendments or when those contracts are renewed Statements of commitment by contractors to Strategic Goals, Mission and Vision Statements, and Guiding Principles Improved budget process starting in 2016 or 2017 based on recommendations from the SCRRA Ad Hoc Governance Committee and other recommendations from Member Agencies and the SCRRA Board
Strategy F: Secure Multi-Year Funding Commitments from Member Agencies for Operations and Rehabilitation and an agreement on Capital Project priorities	<ul style="list-style-type: none"> Secured signed multi-year MOUs with Member Agencies in coordination starting with the 2017 or 2018 Budget process. Complete SRTP with approved list of capital project priorities

Goals and Strategies	Measurable Outcome (Performance Measurements)
Strategy G: Secure Clean Opinions on Annual Audits	<ul style="list-style-type: none"> ▪ Clean opinion on annual audits in 2016 and beyond
Goal 3: Invest in Our People and Assets	
Strategy A: Maintain State of Good Repair (SOGR) <ul style="list-style-type: none"> ▪ Develop an Asset Management Plan ▪ Develop a multi-year rehabilitation plan ▪ Put available funding to work as quickly as possible 	<ul style="list-style-type: none"> ▪ Developed Asset Management Plan ▪ Developed multi-year rehabilitation plan that is financially constrained within the 3-5 year timeframe and one that is unconstrained representing full State of Good Repair (SOGR) for future years ▪ Actual project expenditures compared to Authority targets and guidelines by year
Strategy B: Recruit and Maintain a Qualified and Diverse Workforce <ul style="list-style-type: none"> ▪ Fill vacant positions ▪ Improve staff engagement ▪ Reduce turnover rates ▪ Implement succession planning 	<ul style="list-style-type: none"> ▪ Number of vacancies filled ▪ Survey of staff ▪ Reduced turnover rates ▪ Succession plan for every SCRRA key position
Goal 4: Retain and Grow Ridership	
Strategy A: Improve On-Time Performance	<ul style="list-style-type: none"> ▪ Positive trend in On-Time Performance
Strategy B: Develop a Comprehensive Marketing Plan and Update it Annually. Areas of focus could include: <ul style="list-style-type: none"> ▪ Highlight areas of potential growth ▪ Develop marketing partnerships with Member Agencies ▪ Update origin-destination surveys regularly 	<ul style="list-style-type: none"> ▪ Developed Marketing Plan with performance measurements to define marketing success ▪ Increased market share of Metrolink service ▪ Increased marketing with Member Agencies ▪ Improved origin-destination survey data for route planning
Strategy C: Improve Analysis of Service Changes to Incorporate Impacts to Existing Heavy Users of Metrolink Service	<ul style="list-style-type: none"> ▪ Retained ridership
Goal 5: Increase Regional Mobility	
Strategy A: Improve Connectivity with Regional Transit Agency Services	<ul style="list-style-type: none"> ▪ Increased and improved connectivity of local and regional transit systems to Metrolink
Strategy B: Expand and Enhance Partnerships and Coordination with Station Cities	<ul style="list-style-type: none"> ▪ Survey of Station Cities to determine success of coordination and partnerships
Goal 6: Improve Communications to Customers and Stakeholders	
Strategy A: Improve Customer Amenities <ul style="list-style-type: none"> ▪ Online Ticketing ▪ Mobile Device Amenities 	<ul style="list-style-type: none"> ▪ Customer survey of satisfaction with online ticketing ▪ Customer survey of satisfaction with communications access for mobile devices (e.g., Wi-Fi reception, charging capability)
Strategy B: Enhance Passenger Information Systems	<ul style="list-style-type: none"> ▪ Survey of passengers to determine success of efforts in enhanced information systems
Strategy C: Improve Customer Communication Related to Service Interruption and Delays	<ul style="list-style-type: none"> ▪ Number of customer complaints about communication of service interruption and delays in relation to ridership
Strategy D: Improve Ticket Vending Machine (TVM) Reliability <ul style="list-style-type: none"> ▪ Rehabilitate Existing TVM's ▪ Replace TVM's 	<ul style="list-style-type: none"> ▪ Rehabilitation of all existing TVM's by December 2015 ▪ Replace all TVM's by end of 2017

Goals and Strategies	Measurable Outcome (Performance Measurements)
Strategy E: Strengthen Reporting to the Board	<ul style="list-style-type: none"> Establish process to report on circumstances that impact the implementation of major Agency plans Establish process to report on contracts that are cancelled; Board Reports Revised Board Report Template that incorporates discussion of Agency strategic goals or principles
Strategy F: Strengthen Role of Technical Advisory Committee (TAC) in Reviewing Technical and Policy Issues	<ul style="list-style-type: none"> Present all Board items to TAC for review on a monthly basis prior to Board consideration of those items
Strategy G: Improve Communication and Partnerships with Member Agencies	<ul style="list-style-type: none"> Increased collaboration and survey of Member Agencies to determine success of communication and partnerships
Goal 7: Improve Organizational Efficiency	
Strategy A: Clearly Define Staff Roles and Responsibilities	<ul style="list-style-type: none"> Defined and communicated staff roles and responsibilities
Strategy B: Improve Internal Communications	<ul style="list-style-type: none"> Annual survey of staff to determine success of internal communication
Strategy C: Improve External Communications	<ul style="list-style-type: none"> Annual survey of Member Agencies, riders and other stakeholders to determine success of external communication
Strategy D: Reinforce Regular Training for the Board in Ethics and Regulatory Compliance	<ul style="list-style-type: none"> Record of training sessions and required form submittals

NEXT STEPS

This Short-Range Transit Plan defines a 5-year direction for the SCRRRA. In the short-term, SCRRRA is focused on addressing goals and growth scenarios by adopting an investment strategy and taking actions with four major focus areas:

1. Strengthening core institutional functions, focused on fiscal sustainability, safety, system reliability and customer communications and responsiveness.
2. Evaluate the potential for additional reverse commute trips to address the growth balance of travel patterns in the region. Initiate discussions with host railroads on potential for reverse peak services on corridors that are governed by shared use agreements.
3. Work with Member Agencies to develop consensus around desired service growth and state of repair of system assets (systemwide and within each county) and identify sources of funding (including Member Agency funding and other grants) to support desired service levels, asset condition, and capacity expansion.
4. Establish strategic partnerships to tap new sources of funds, encourage rail friendly development, and enable Metrolink to better serve markets within its existing network.

These focus areas, including any updates to the public transportation system, fleet needs, capital and operating costs and revenues, and any new transit services, projects and recommendations, should be revisited and regularly updated.

