

A high-speed train is shown in motion, blurred to convey speed, traveling along tracks that recede into the distance under a clear blue sky. The train is positioned on the right side of the frame, moving towards the left.

OUR FUTURE is ON TRACK

METROLINK®

10-Year Strategic Plan

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CEO Introduction

Metrolink is moving forward. At 23 years, Metrolink continues to connect the Southern California region together, giving people access to their jobs and new housing opportunities and providing significant benefits to improving the efficiency of our transportation system and the quality of the air we breathe. Metrolink has been a critical part of Southern California's transit renaissance and I have been happy to be a part of it, especially as leader of two of Metrolink's member agencies. Because of this long and proud tradition of providing rail service in Southern California, I am pleased to take on the role of leading Metrolink in this time of tough challenges.

This Strategic Plan reflects the significant challenges that Metrolink is facing during a time when ridership and revenue are down.

We need to bring the way we do business up to date. SCRRRA was established by California legislature in 1990 as the operator of the Metrolink commuter railroad. Past business practices and financial systems still need to catch up to the way we have to do business today. Because of system issues in the past, we were unable to report financial data on a monthly basis. This prevented us and our partner member agencies from having information to make appropriate adjustments to our spending. We also had low cash reserves that left us in a situation where we weren't paying back an outstanding loan. We owe it to our partners to be transparent with them so that they will have the trust in us to invest more.

Our infrastructure has reached its capacity and is aging past its useful life. For example, many of our locomotives are now more than 23 years old, well past the time when they should have been overhauled. Many of these locomotives would have gone through a Service Life Extension program approved by the Board in 2012, but was not followed due to (1) performance issue with contractor and (2) inability to redirect funding for maintenance work. At this time, we need to continue to make sure the rest of our fleet – cab cars and coaches – is to the latest standards of safety and comfort. When we see the condition of our platforms at Union Station, the insides and outsides of our cars, our maintenance facilities, and our ticketing systems, we know we can do better and we can't defer and avoid confronting what needs to be done. Keeping infrastructure in a state of good repair, whether it's our fleet, our track, or our bridges is critical to bring value to our customers by delivering them to their destinations safely and on time.

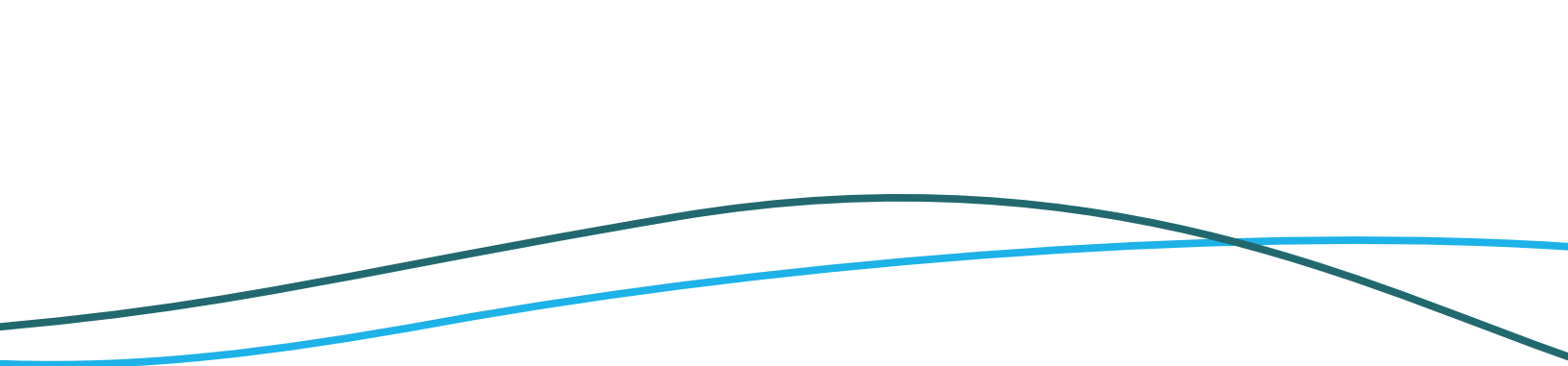
We need to build on a foundation of our people and change our working culture to bring a sense of urgency. Metrolink has lost a lot of its staff lately, so much so that 166 in 262 employees (63%) have been with the agency 5 years or less. We need to build a culture of trust and security with capable individuals who can stay on to build the next Metrolink era, another quarter century beyond. A vision to move forward is needed so we are not stuck in a rut deferring and avoiding our challenges, but confronting them confidently, collaborating with all our partners to find solutions. We need to make

Metrolink a world-class organization where one can have an exciting and rewarding career.

To address these challenges, focus and discipline is needed to sustain the trust of our riding public and of our partners in running service on the tracks day in and day out.

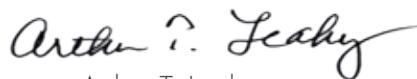
We have a number of initial successes that point the way to progress:

- **Implementation of Positive Train Control** – We are the first commuter railroad in the nation to complete our implementation of life-saving PTC technology and to submit for federal certification of our system. With this, we continue our role as the established leader for safety among commuter rail systems in the United States.

- 
- **Launch of Mobile Ticketing** – We have launched, will leap forward and provide a whole new way of buying tickets by smartphone and on line. No more having to wait in lines.
 - **Innovation in Fares** – We are experimenting with our fare system. We're capturing more passengers through experiments in our fares. Through a partnership with Metro, we experimented with lower fares across the board on the Antelope Valley Line and targeted discounts on shorter distance trips to yield year-over-year gains of nearly 25%. We are testing new discount products system-wide and with the launch of the Perris Valley Line. In January, this experiment will be extended system-wide. We will do thorough data collection and analysis of the results. Our goal is to increase ridership and revenue.
 - **New Clean High-Horsepower Locomotives** – We are moving forward to replace more than seventy percent of our aging locomotive fleet. In the past year, we were awarded grants in excess of \$100 million to support another set of new locomotives. The locomotives start coming into service in the middle of this year (2016).
 - **Greater Collaboration with our Partners** – We have started engaging the leadership of our five member agencies in ways that highlight our integration, meeting with the CEOs and Executive Directors, the Chief Financial Officers, and our Technical Advisory Committee. We are tackling our problems together. Metrolink must be more open, more cooperative, and more forthcoming with our partner agencies.
 - **Local Coordination of Rail Service** – Los Angeles – San Diego – San Luis Obispo Rail Corridor is now under the local management by the Orange County Transportation Authority. As five of seven of those lines run in the LOSSAN Rail Corridor, we are continuing to build our strong partnership with them to make our customer experience seamless across the two services. We need to develop a constructive cooperative relationship to build synergy between Metrolink and Amtrak services and personnel.
 - **Improved Financial Reporting and Financial Position** – We are closing our books on a monthly basis and reporting to our Board and our partners, building trust through transparency.
 - **Higher Cash Balances** – Moreover, our cash balances have improved by expedited billing and collection of amounts due.
 - **Extension to the Perris Valley** – Through the investment of our partners, the Riverside County Transportation Commission and the Federal Transit Administration, we are extending service 24 miles toward the Perris Valley, the first major change to our route network in 14 years.

Based upon passenger miles, we are the second biggest transportation provider in Southern California. In addition, we have the highest farebox return and the lowest subsidy per passenger mile of any carrier in our region. Our service provides much needed mobility. We help relieve congestion on the I-5, the 91, the 60, the 10, the Hollywood freeway, and the Ventura freeway.

We have a very solid foundation to build on. Metrolink, indeed, has a bright future. We are an essential part of Southern California.



Arthur T. Leahy
Chief Executive Officer

Executive Summary



EXECUTIVE SUMMARY

This Strategic Plan was prepared over an 18-month period by Southern California Regional Rail Authority (SCRRA) and consultant staff at the request of the Board of Directors. As background, the SCRRA was established in 1991 by a common joint exercise of powers agreement among its five member county commissions 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 SCRRA Strategic Plan is a tool that will assist the Board in creating funding priorities and in establishing a road map for SCRRA and its funding partners. The plan will provide goals and a vision, identified through collaboration, for which SCRRA, its members, and its contractors can all work together to achieve. Through a variety of channels including workshops, meetings, surveys, and interviews, significant input was received by SCRRA Member Agencies, Board Members, the public-at-large, customers, and stakeholders.

The analysis contained in the attached Plan is based on many elements including an assessment of the current Metrolink system and the environment in which it operates, the definition of functions that can improve and evolve, and the identification and evaluation of potential future growth scenarios. Operating costs and subsidies as well as capital requirements were developed for each of the Scenarios. The effort concludes with a summary of what needs to take place to return to the fundamentals as well as what is possible over the next 10 years. Additionally, interim steps in supporting a Short-Range Transportation Plan are discussed.

The Plan’s primary purpose is to return SCRRA to a “back to basics” approach and provide a road map on how to address the flushed out issues with a variety of solutions. In doing so, the Plan defines a series of Agency goals that emphasize a strengthening of SCRRA’s core functions and balances these with customer needs and the demand for growth within the operational and fiscal context in which that growth will occur.

GUIDING PRINCIPLES

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

- 1 CUSTOMER VALUE** focuses on the “value proposition” for riders and what they are getting in return for their fare.
- 2 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.
- 3 CONNECTIVITY** is how the Metrolink system fits into the regional transportation framework and connects land use and development
- 4 COLLABORATION** is key to SCRRA’s role as a Joint Powers Authority and is vital to implementing the Strategic Plan vision.
- 5 TRANSPARENCY** is how SCRRA presents information to its Member Agencies and the public, increasing trust between all stakeholder

MISSION, VISION & VALUES

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 we do demonstrates an appreciation for quality of life, and every act values the lives of our employees, contractor co-workers, customers, and communities.
- **Quality:** We operate on best practices and principles with a continued focus on providing high-quality service to our customers every day on every ride.
- **Efficiency:** As responsible stewards of public funds, we embrace innovative solutions and continuous improvement for the lowest cost and most efficient operations.
- **Growth:** We continuously seek creative, progressive, and collaborative solutions to promote investment, develop partnerships, and increase capacity to improve the mobility of Southern Californians.

FOUNDATION FOR THE FUTURE

The Strategic Plan analysis phase provided the following data, which serves as a baseline for future action:

- Safety remains a high priority. SCRRA has addressed all safety themes in the expansive safety report issued five years ago except the last two themes, Strategic Plan and Governance. This Strategic Plan and the SCRRA Ad Hoc Governance Committee established following the July 2014 Strategic Plan Board Workshop now address those two themes.
- While the majority of the Metrolink passenger population remains white-collar workers, passengers now represent commuters from and traveling to more diverse locations, more travelers during off-peak hours and in reverse direction, and more 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
- SCRRA 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 Strategic Plan, using customer feedback, Board and Member Agency input, historic cost trends, and market potential, defines a vision for SCRRA for the next 10 years. It has done so in a manner that does not just look at the growth of the Metrolink system, but at the fundamental functions of SCRRA and what is needed to improve these functions in order to allow the Metrolink 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 SCRRA (see **Table E.1**). Each of the strategies is presented with suggested performance metrics to help measure the progress in implementing the strategies. Some strategies can be implemented in the short-term. Others are for a longer-term effort.

CONCLUSION

This plan sets the flexible framework for SCRRA to develop the funding, infrastructure, and governance necessary to provide excellent, reliable, commuter rail service in Southern California into the foreseeable future.

In the short-term, SCRRA can focus on addressing Agency Goals and growth scenarios by adopting an investment strategy and taking actions with four major focus areas:

1. Strengthen core institutional functions, focused on fiscal sustainability, system reliability, and customer communications and responsiveness.
2. Focus initial investment in the rehabilitation of the system (vehicles and infrastructure) to ensure a state of good repair that can provide a base for supporting the growth scenarios.
3. 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.
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.

Table E.1: Goals, Strategies, and Metrics

Goals and Strategies	Measureable Outcome (Performance Measurements)	Short-Term (1-5 years)	Long-Term (5-10 years)
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 	■	
Strategy G: Secure Clean Opinions on Annual Audits	<ul style="list-style-type: none"> Clean opinion on annual audits in 2016 and beyond 	■	■

Goals and Strategies	Measureable Outcome (Performance Measurements)	Short-Term (1-5 years)	Long-Term (5-10 years)
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 	■	
Strategy D: Develop and Implement Service Coordination and Connectivity Plans	<ul style="list-style-type: none"> Growth in ridership 		■

Goals and Strategies	Measureable Outcome (Performance Measurements)	Short-Term (1-5 years)	Long-Term (5-10 years)
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 	■	
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 	■	■

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Strategic Plan Purpose



STRATEGIC PLAN PURPOSE

The purpose of the SCRRA Strategic Plan is to be a guide for strengthening the core functions of SCRRA and to plan for the growth of the Metrolink system. With this direction identified, the Southern California Regional Rail Authority (SCRRA) and its Member Agencies can focus resources on the most important core functions of SCRRA and plan for the capital funding and operating support necessary to respond to demand for expanded commuter rail services and to evolve into a more significant role in providing for regional transit travel.

This Strategic Plan was prepared over an 18-month period by consultant and SCRRA staff, with input from SCRRA Member Agencies and Board Members, customers, stakeholders, and the public at-large. The analyses conducted as part of this Strategic Plan are based on many elements, including an assessment of the current Metrolink system and the environment in which it operates, the definition of functions that can improve and evolve, and the identification and evaluation of potential future Growth Scenarios. Operating subsidies and capital requirements were developed for each of the Scenarios. The effort concludes with a summary of what is possible over the next 10 years and some interim steps in supporting a Short-Range Transportation Plan.

Today, SCRRA is at a crossroads. However, rather than in previous times where the crossroads arose from the constraints on SCRRA's growth, today, SCRRA is faced with redefining its purpose, evaluating its core functions, and returning to a "back to basics" approach. How does Metrolink fit into the larger transportation network of Southern California and the State?

The SCRRA Strategic Plan is the first step in documenting the process, recommendations, and analyses of the transitions and challenges being faced by the Agency. Its purpose is to define a series of Agency goals that

emphasize a strengthening of SCRRA's core functions and balance these with customer needs and the demand for growth within the operational and fiscal context in which that growth will occur.

What the Plan Is

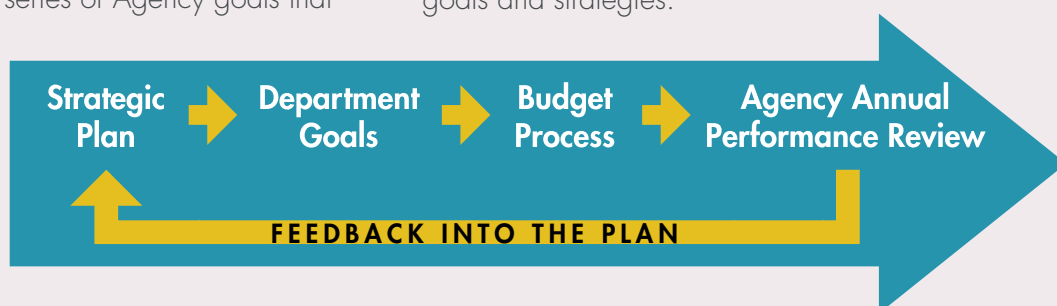
This Strategic Plan is the guide for SCRRA over the next 10 years. The Plan serves many purposes:

- Clearly defines the purpose of the organization and establishes realistic goals and objectives.
- Communicates those goals and objectives to the organization's stakeholders.
- Ensures the most effective use is made of the organization's resources by focusing those resources on the key priorities.
- Provides a base from which progress can be measured.
- Brings together everyone's best efforts and builds consensus about where the organization is going.
- Explores capital investments and provides a foundation for future discussions and planning efforts with Member Agencies.

The Plan indicates a general sense of resource requirements for SCRRA and its Member Agencies for the goals, but does not commit the Board or Member Agencies to costs for each goal or strategy defined. That is done through the implementation plan and the budget process.

The following diagram (**Figure 1**) shows how this Strategic Plan will be integrated into the budget process and drive performance. The Plan is a flexible document that will be updated every two years, based on the feedback from the annual performance review of the goals and strategies.

Figure 1: Strategic Plan Drives Budget and Performance



System Overview



SYSTEM OVERVIEW

THE METROLINK SYSTEM

SCRRA is the Joint Powers Authority (JPA) that operates the Metrolink commuter rail system. Metrolink is the eighth largest commuter rail operation in the United States in terms of ridership (see **Figure 2**). 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 includes more than 512 route miles with 165 trains each weekday. As of June 2015, five Metrolink lines also provide weekend service, with 48 trains on Saturdays and 42 trains on Sundays. Expansion to 536 route miles will occur with

the initiation of service in the Perris Valley corridor in early 2016. Average weekday ridership is just under 43,000 (one-way trips) and average weekend ridership is about 20,000. Total rolling stock inventory includes 55 locomotives and 224 commuter rail coaches and cab cars (including two leased locomotives). Metrolink's service area appears in **Figure 3**.

Metrolink trains carry their riders safely on routes parallel to highways that experience chronic congestion. As Southern California's population continues to grow, congestion on area highways is growing as well. Metrolink trains are an alternative solution for the traveling public.

Figure 2: Average Weekday Ridership Compared to Other Commuter Rail Systems (2013)

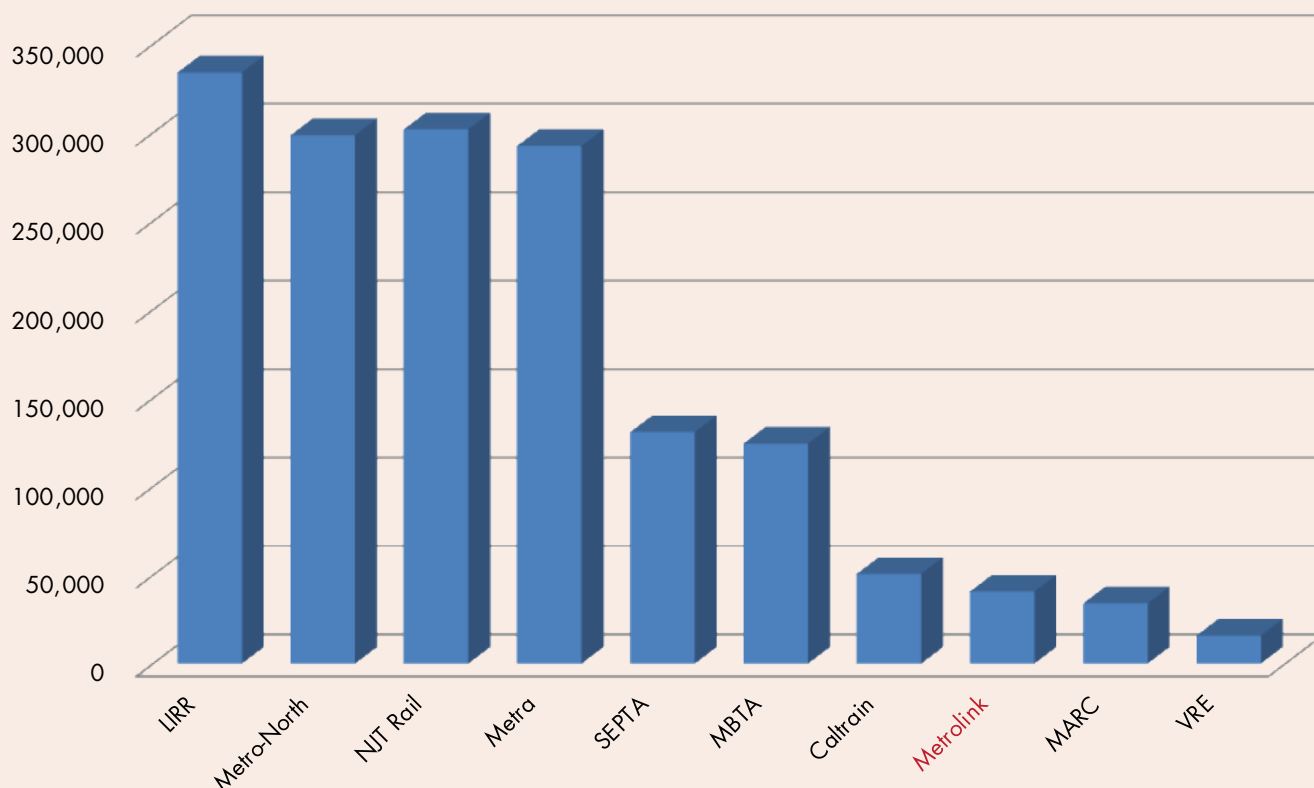


Figure 3: The Metrolink System



THE ORGANIZATION

The SCRRA JPA was formed in 1991 as the operator of the Metrolink commuter rail system. Members of the 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)

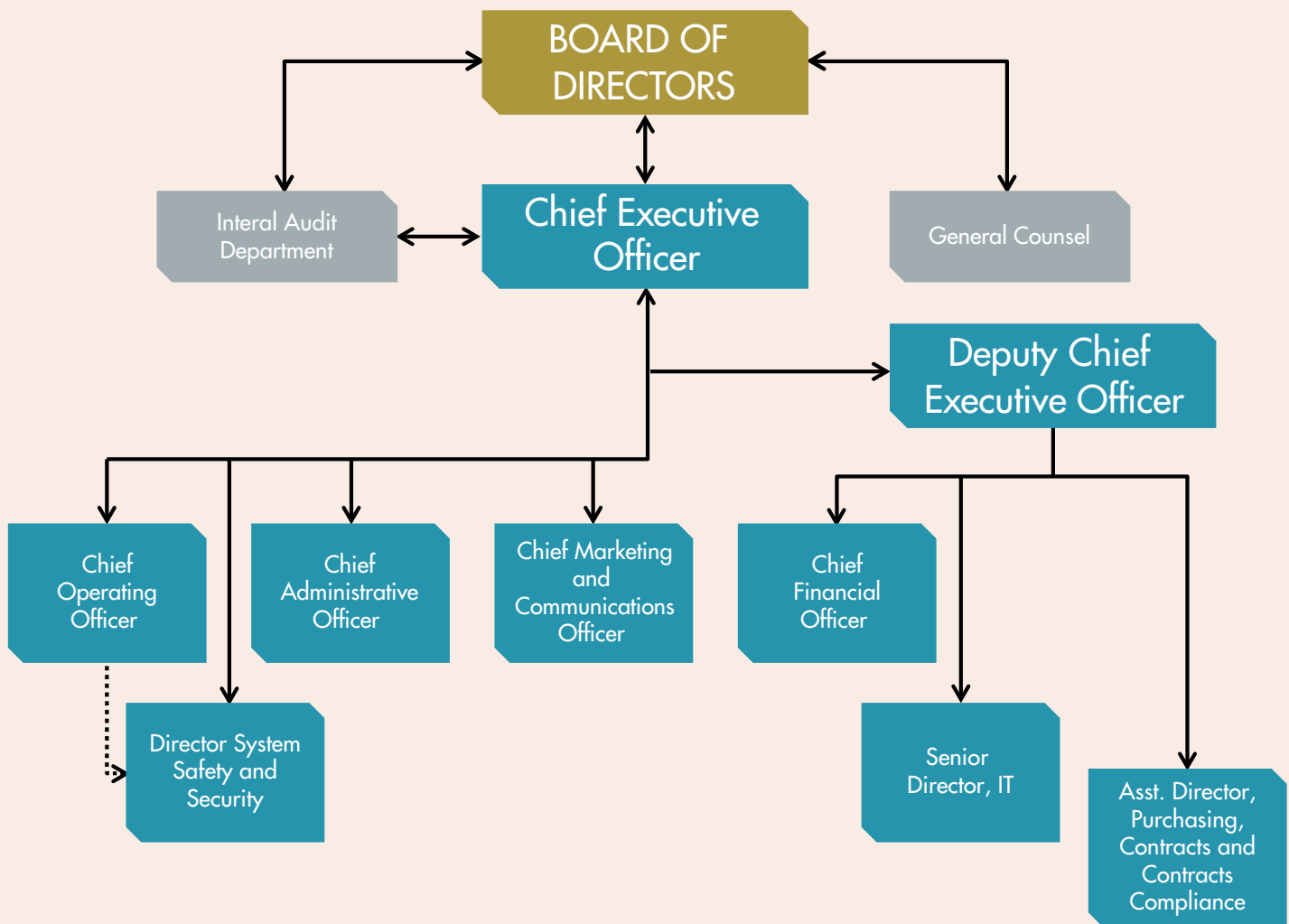
Member Agencies contribute to capital improvements within the Metrolink system and provide operating subsidies for operating costs not covered by the farebox recovery. Each Member Agency owns right-of-ways over which Metrolink commuter rail services operate. Metrolink also operates over right-of-ways 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.

Executive staff of SCRRA includes a Chief Executive Officer, a Deputy Chief Executive, and four Chiefs to the

Executive that oversee the four functional departments (see **Figure 4**). The FY 2014-15 SCRRA Budget includes 275 authorized positions. The employees of the SCRRA administer the Metrolink system and most of the operation is provided by contractors. SCRRA contractors also employ additional staff to operate and maintain the Metrolink system.

Figure 4: Metrolink Organization for the Office of CEO



Transitions for Metrolink



TRANSITIONS FOR METROLINK

The Metrolink system has experienced a number of significant transitions in its recent history. Since service began on October 26, 1992, Metrolink has more than doubled its ridership and service. With this growth comes both benefits, in the form of new opportunities, and impacts, with new challenges to address. To address these challenges, an agency needs to identify and plan for transitions in the customer and operational needs of the railroad. How early these challenges are identified and how well they are planned will affect the long-term success of the agency.

Significant transitions have occurred in seven key areas over the past 23 years, and focus on:

- Safety
- Service Growth
- A Changing Demographic and Passenger Base
- Evolving Regional Growth & Travel Patterns

- Reaching Capacity
- Aging Network and Infrastructure
- Funding
- Governance

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 5**). Similarly, as illustrated in **Figure 6**, 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 5: Ridership Growth (1993-2015)

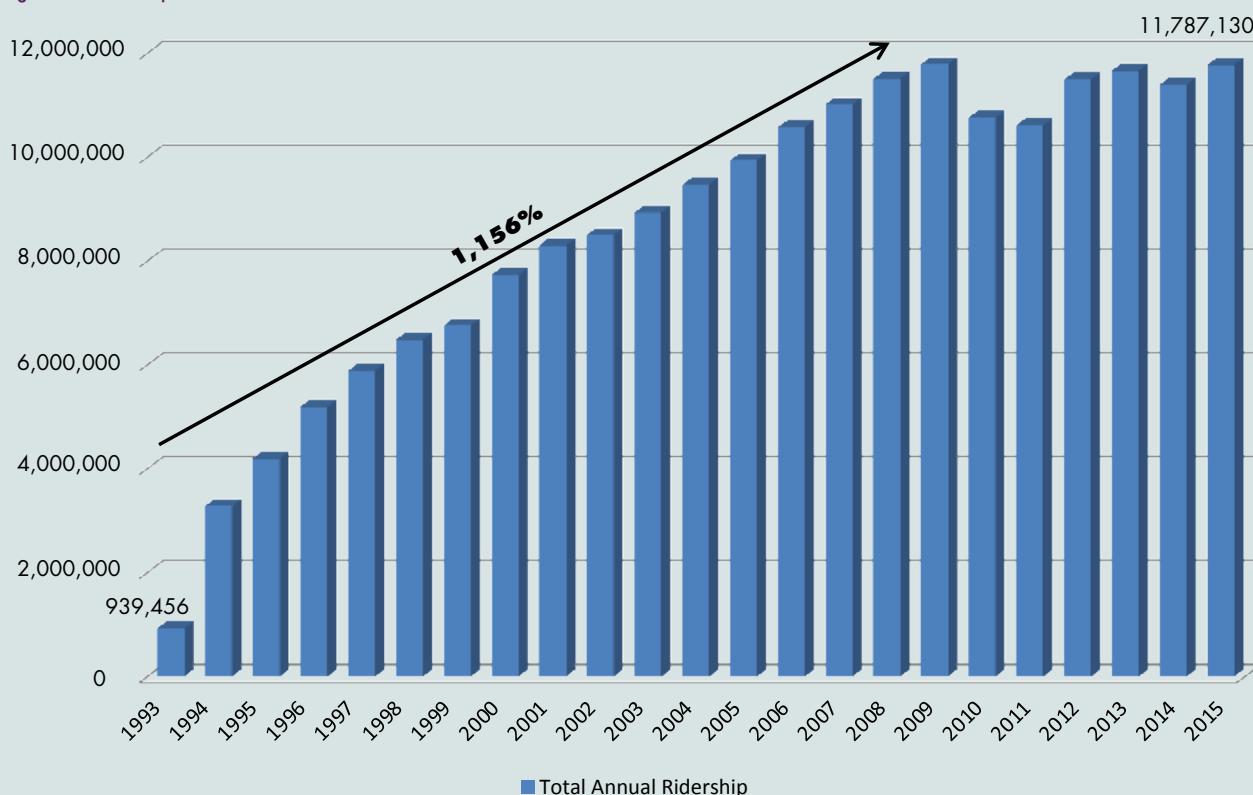
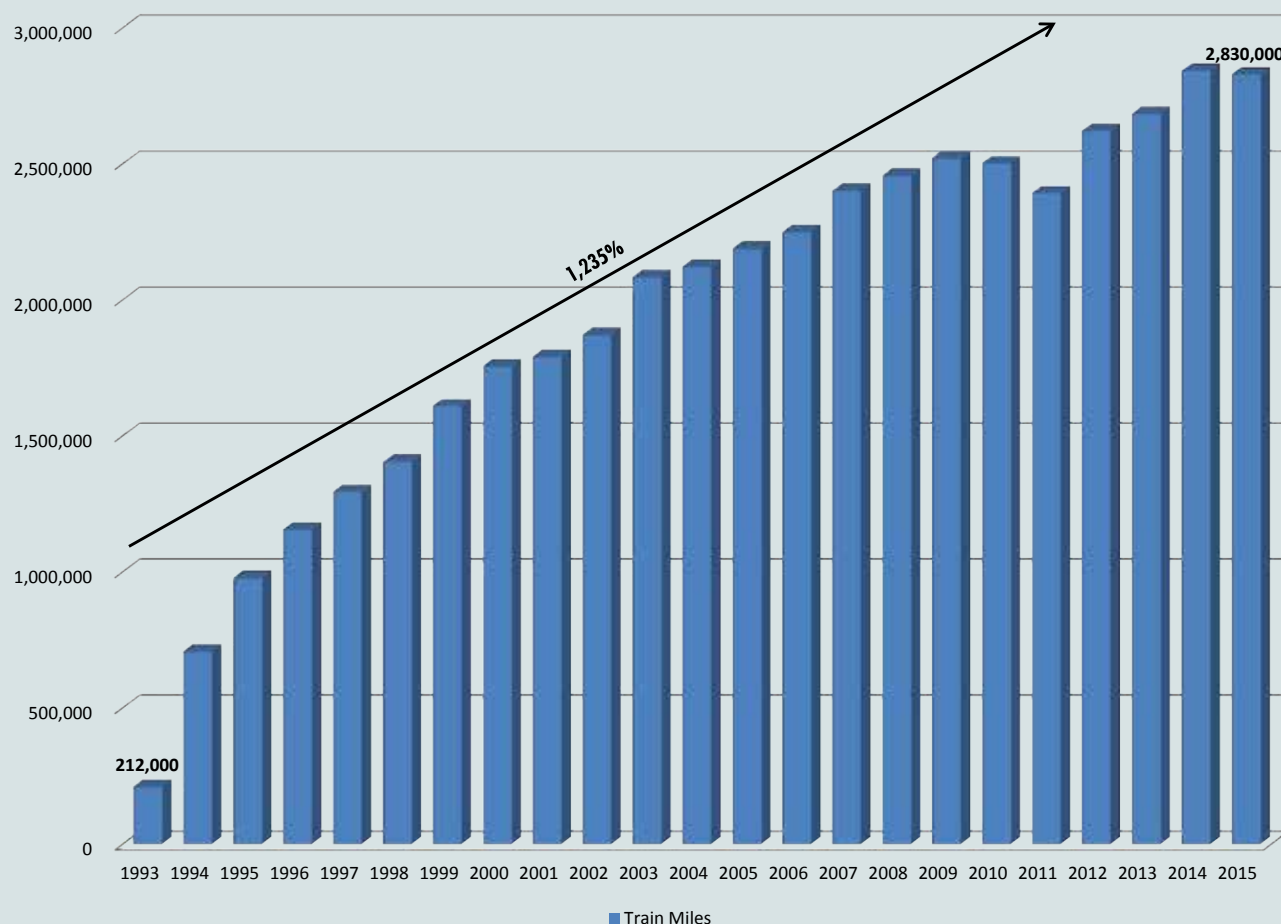


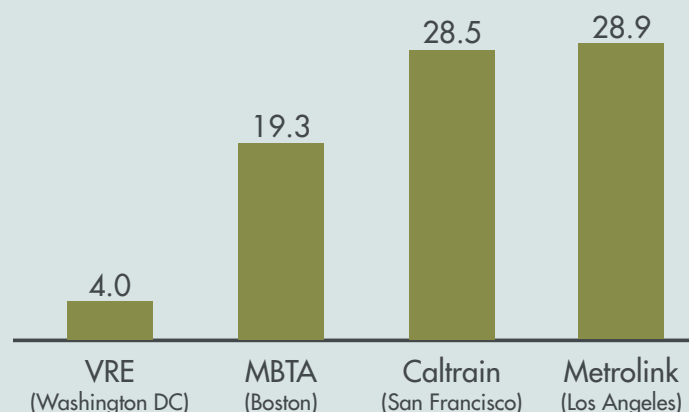
Figure 6: Growth in Annual Train Miles (1993-2015)



A CHANGING DEMOGRAPHIC AND PASSENGER BASE

The nature of Metrolink's passengers is changing. Commuter rail passengers were predominately white-collar workers headed for a central downtown location during traditional weekday working hours. Passengers now also represent a more diverse set of commuters traveling to more diverse locations, travelers during off-peak hours and reverse direction, and composed of students and leisure travelers. The diversification of trip types and the income profile of the Southern California region contributes to an overall lower average income of riders than comparable systems nationwide (see **Figure 7**). 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 diverse passenger needs.

Figure 7: Percent Ridership by Income Class (Households (HHs) less than \$50K)



EVOLVING REGIONAL GROWTH AND TRAVEL PATTERNS

Since its inception, the primary destination 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 8** and **Figure 9**).

By comparison, decreases are projected to/from areas served by the 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 8: Net Change to Work Catchment Areas from All Home Catchment Areas (All Purposes, Commuter Rail 2010-2035)

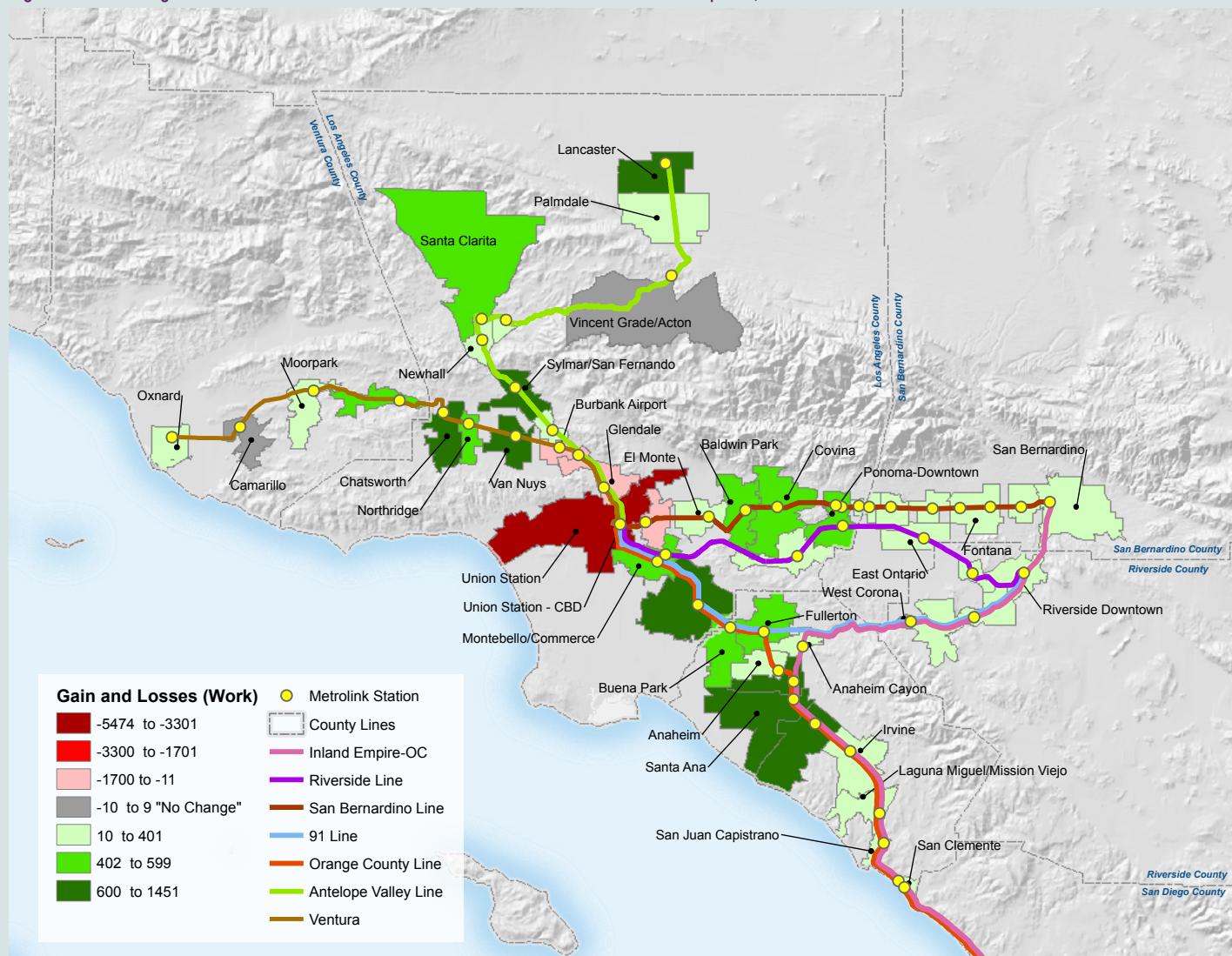
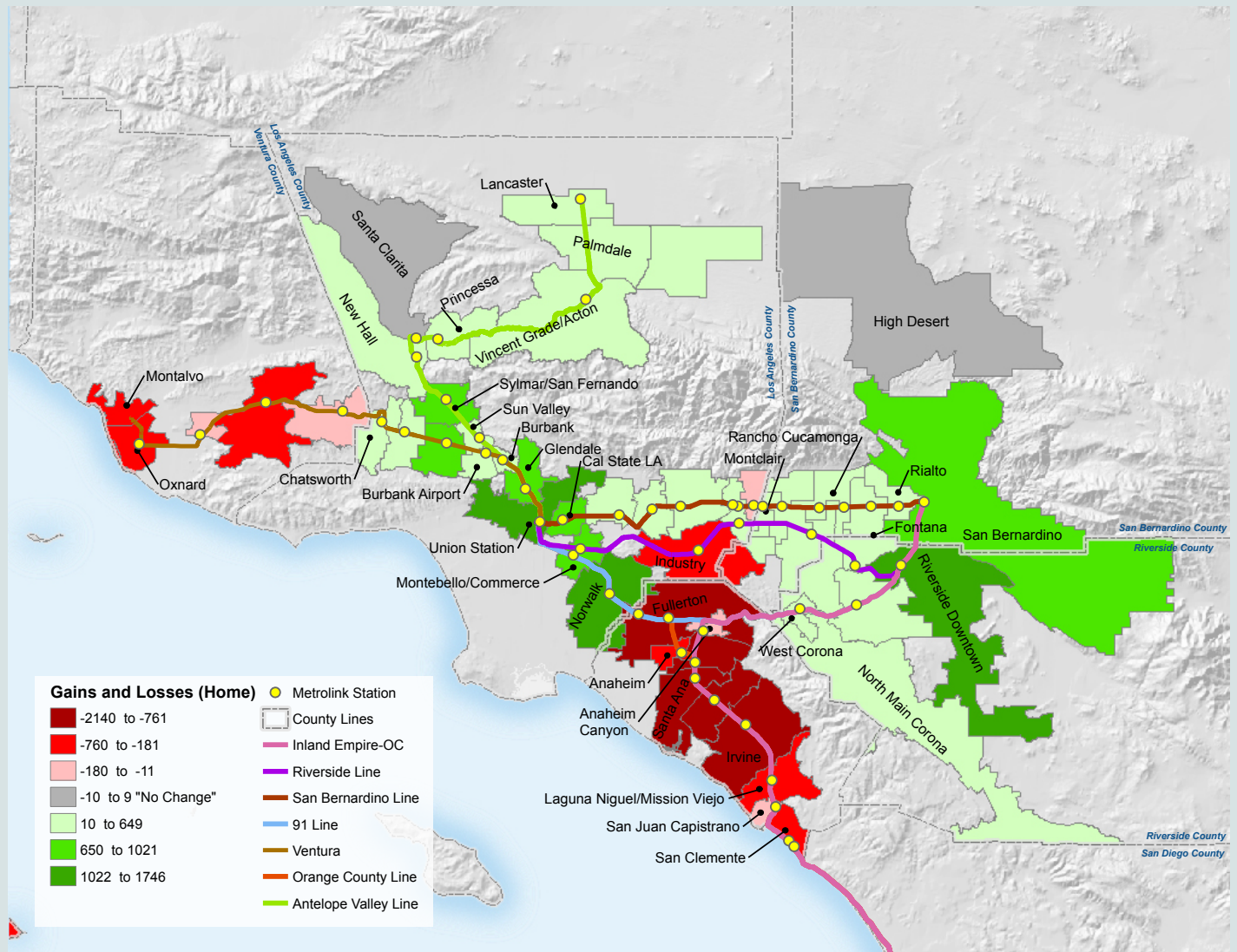


Figure 9: Net Change to Home Catchment Areas from All Work Destination Areas (All Purposes, Commuter Rail 2010-2035)



REACHING SYSTEM CAPACITY

Service has grown, but has now effectively reached the capacity of the system. Metrolink's line capacity is constrained by operating agreements and the capacity of the existing infrastructure (see **Figure 10**). Single track sections and station capacity limit incident recovery and service frequency on all lines. Furthermore, for lines that operate, for at least a portion, on freight railroads (the

Riverside Line, the Orange County Line, the 91 Line, the IEOC Line, and the outer portion of the Ventura County Line), service growth is constrained by agreements with freight railroads and the volume of freight traffic on the line. Growing freight volumes also impacts on-time performance and growth of the system.

Figure 10: Existing Metrolink Network Line Capacity Constraints



AGING NETWORK AND INFRASTRUCTURE

When SCRRA's Member Agencies purchased the rights-of-way and track infrastructure in the early 1990's, much of the infrastructure was already aged beyond a state of good repair. A significant portion of the track infrastructure has since been replaced, but a significant portion of track and structures remain aged and are approaching the need for replacement. Importantly, equipment that supports the service (a majority of locomotives, fleet, and ticket vending machines) are over two decades in age and are in need of major overhaul or replacement.

In 2013, 55 percent of delays were caused by Operations (OPS), which includes passenger delays, persons needing assistance, medical emergencies, etc; Mechanical; and Signal and Communications (S&C) issues. Physical malfunctions, such as mechanical and S&C delays, were responsible for 35 percent of delays in 2013 and point toward physical asset issues, such

as equipment breaking down or not performing as expected (see **Figure 11**). The remaining ten percent of delays were caused by "Other." Aging equipment is resulting in an increase in cancelled or annulled trains, resulting in service delays.

The rapid growth of the service through the 1990's and much of the 2000's required Metrolink to grow faster than the resources available and, as a result, many of the locomotives and much of the infrastructure did not receive the overhauls or replacements they required to ensure a high level of reliability.

The combination of limited capacity and aging infrastructure, coupled with continued growth in freight traffic, creates an environment where reliability and on-time performance are suffering and SCRRA needs to rebuild and reinvest in order to stabilize and again grow (see **Figure 12**).

Figure 11: Cause of Train Delays (2005-2013)

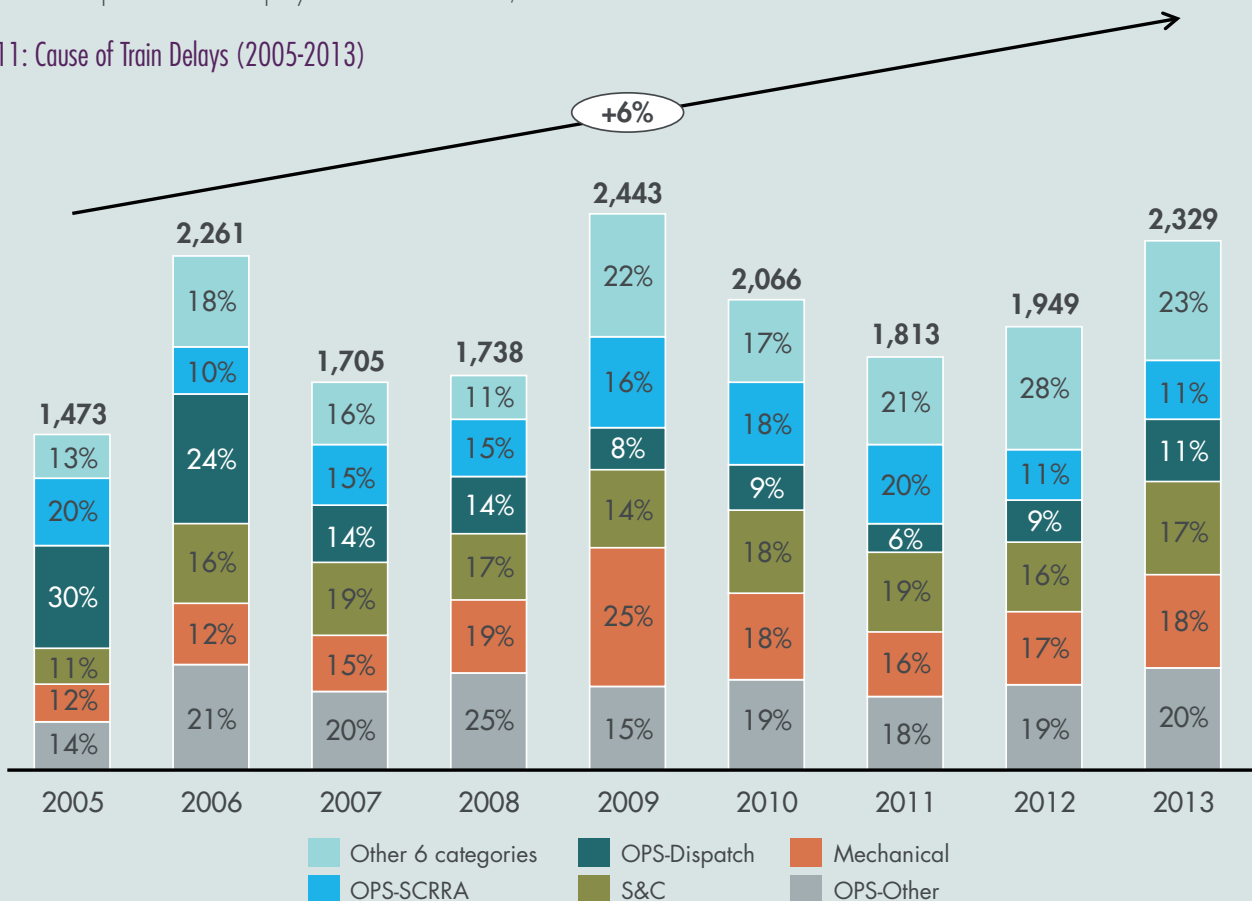
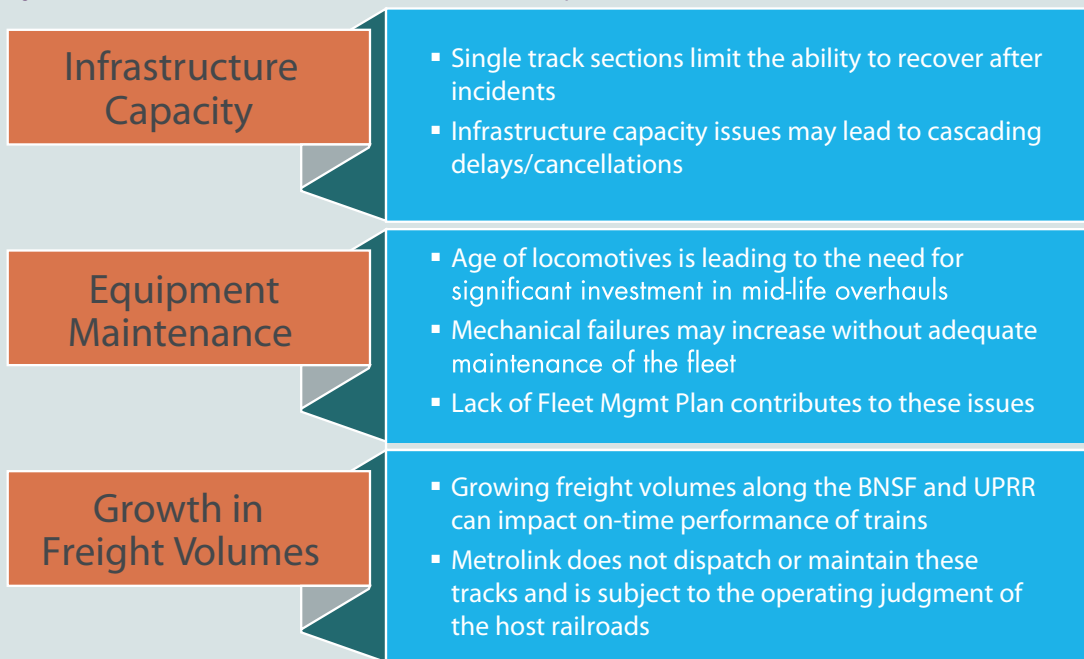


Figure 12: Causes of Low On-Time Performance and Reliability



SAFETY

Safety is a number one priority for Metrolink. Significant incidents occurred in 2005 and 2008, which spurred SCRRRA to reinforce its investments in infrastructure to support safety and its focus on a safety culture. In September 2008, the SCRRRA Board of Directors established an independent Commuter Rail Safety Peer Review Panel to review the Metrolink system and make recommendations to increase safety and reduce risk. The Peer Review Panel, composed of industry experts, presented its observations and recommendations in an Enhanced Safety Action Plan to the SCRRRA Board of Directors on December 12, 2008, and published its "Metrolink Commuter Rail Safety Peer Review Panel Final Report" on January 5, 2009.

The Board then recommended that the Panel conduct a follow-up evaluation or "report card" in six months to determine the progress SCRRRA had made in implementing the recommendations in the Panel's Metrolink Enhanced Safety Action Plan. The Panel completed that report, dated December 31, 2009. In 2013, the Panel prepared another "report card" to assess the progress SCRRRA made in implementing the recommendations in the Panel's recommended Metrolink

Enhanced Safety Action Plan during the four years since the original report.

The SCRRRA Board of Directors approved the reports and its action plan as well as the subsequent updates. The Metrolink Enhanced Safety Action Plan recommended 64 safety enhancements within eight safety themes, which included:

- Safety Culture
- SCRRRA Organizational Structure
- System Safety Program Plan
- Safety Performance Measurements
- Infrastructure Maintenance
- Analysis of Metrolink Short-Term Safety Projects
- Strategic Plan
- Governance

At the time of the four-year update, SCRRRA had addressed all issues except the last two. This Strategic Plan and the SCRRRA Ad Hoc Governance Committee, established following the July 2014 Strategic Plan Board Workshop, now address those issues.

GOVERNANCE

Issues related to governance were identified as issues early on in the interviews and discussions with Board members and Member Agency leadership. At the July 11, 2014 Board Workshop, strengths and weaknesses of the Authority governance were presented:

S Board Communication and Governance - Strengths

- Improved structure through reorganization of senior management
- Goal-oriented staff

W Board Communication and Governance - Weaknesses

- Sub-optimal information-sharing procedures
- Internal cultural challenges
- Communication and responsibility gaps with Board and Member Agencies
- Constant rotation of Board members requires ongoing training of technical and governance issues
- Conflicts between regional responsibility and local needs

O SCRRA can improve relationship with Member Agencies in several areas related to transparency

- Transparency and Engagement with Member Agencies
- Clear Budgeting
- Accountability
- Stakeholder engagement
- Increased oversight

T Potential Threats by not Addressing Weaknesses

- Loss of institutional knowledge and talent
- Reduced coordination and transparency between the SCRRA and Member Agencies
- Increase in stress, demands, and time constraints of Board members and senior staff

In response to these strengths and weaknesses, three topics were identified that represent opportunities to improve the governance of the SCRRA and discussed at a Board Workshop on July 11, 2014 (See **Figure 13**).

- 1.** Institutional Structure of the Board
- 2.** Dedicated regional funding source for SCRRA
- 3.** Long-term commitments by Member Agencies to capital and operating expenses, including state of good repair and growth of system

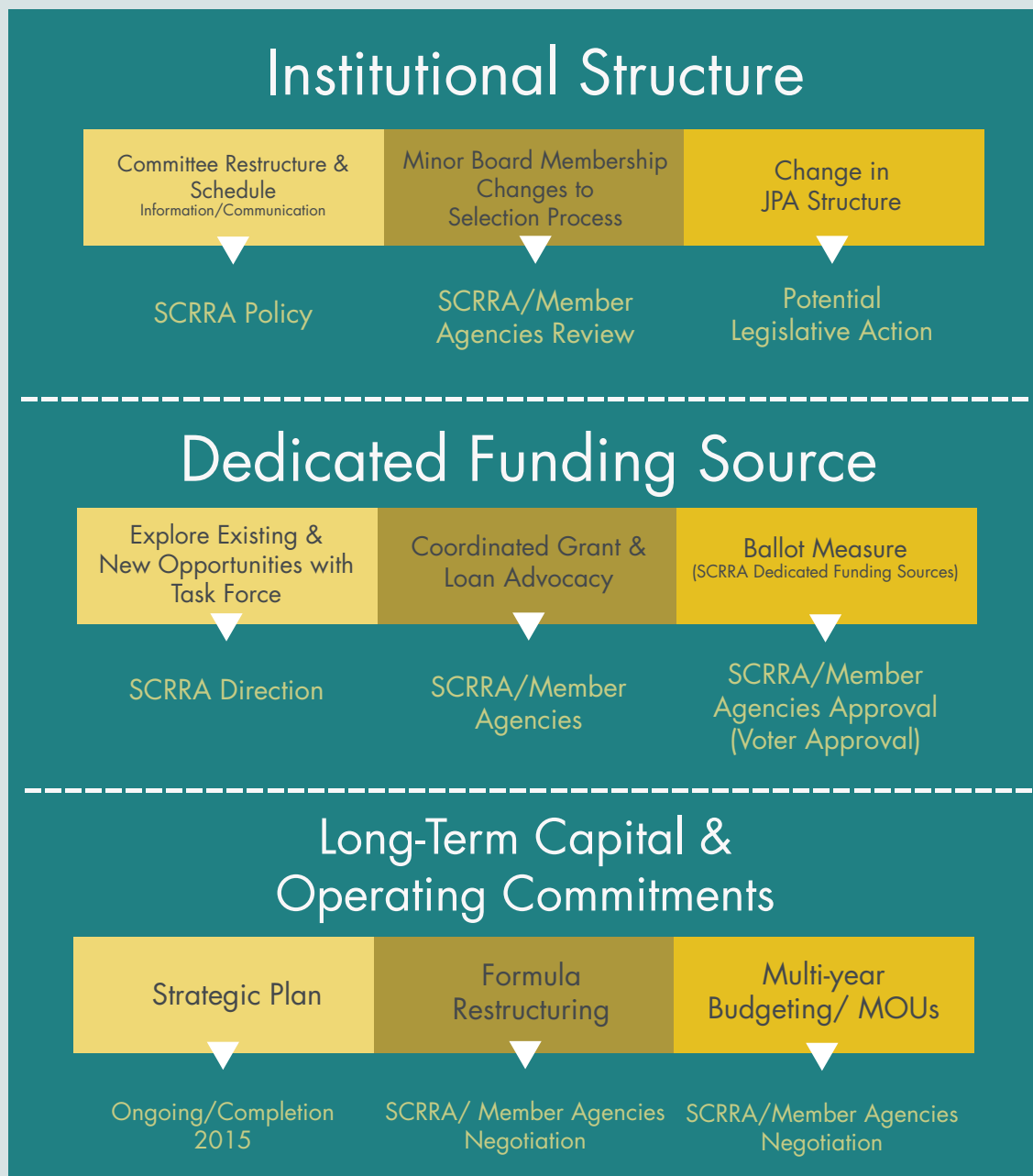
Following the Workshop, the SCRRA Chairman of the Board created a Governance Ad Hoc Committee to explore these three general topics and return to the Board with options for consideration. The Governance Ad Hoc Committee was comprised of Directors for Orange and Ventura Counties and TAC members from Los Angeles, Riverside, and San Bernardino Counties. From the three general topics, seven specific issues were defined by the Committee.

- Governance
- Board Member Requirements
- Technical Advisory Committee (TAC) Role
- Board Report Improvements
- Long-Term Operating and Capital Commitments
- New Funding/Grants Reporting

For each of these issues, potential alternative strategies were explored and listed and presented to the Board for consideration on December 4, 2014. No action was taken by the Board at the time on any of the specific alternatives, although some improvements to reporting to support transparency and various funding sources were pursued. For example, for the topic of governance,

several different organizational structures were identified from peer agencies as potential alternatives for consideration. Different ways of changing Board Member training and roles and responsibilities were also explored. Furthermore, different suggestions were made related to several potential funding sources.

Figure 13: Topics Explored by the Governance Ad-Hoc Committee



FUNDING

One of the great challenges for SCRRA is the lack of a dedicated funding source for either operating or capital expenses since the SCRRA JPA was established in 1991. Funding is currently subject to an annual budget process with separate annual appropriations from its Member Agencies. Currently, there is no mechanism to commit funds over multiple years. The funding issue was discussed at the two Strategic Planning Board Workshops in 2014 with background information provided by the SWOT Analysis (see **Technical Appendix**). The issue was subsequently studied by the SCRRA Ad Hoc Governance Committee.

SCRRA lacks a long-term, dedicated funding source, which makes it more difficult to make long-term commitments. New funding options would either provide a dedicated funding source or provide added funds each year through discretionary grants.

However, as is the case with local funds from Member Agencies, most state or federal grant funds come with a variety of “strings” or restrictions on use, compared to local funds, so that issue should be considered when applying for grants. In addition, a new, regional, dedicated funding initiative for SCRRA may compete with Member Agency efforts to increase their transportation sales tax measures, so timing would have to be carefully planned.

Funding options 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 funding from the State Mass Transit Account
- Regional Funding
 - Dedicated new sales tax measure for Metrolink and other regional improvements
- Local Funding
 - Dedicated multiyear funding from Member Agencies
 - Value Capture funding along the corridor and at station sites through cities/Member Agencies

Develop/join a state-wide coalition with other commuter rail agencies in California

One option discussed by the Ad Hoc Governance Committee was to secure stable state funding for commuter rail systems. This option could result in commuter rail agencies receiving state funding in the future, as do the intercity rail agencies currently.

It is recommended that SCRRA staff report to the Board on a quarterly basis regarding the status of SCRRA grants and Member Agency commuter rail programs and initiatives.

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Metrolink Moving Forward



METROLINK MOVING FORWARD

With SCRRA in transition, how is the purpose and need for the Agency changing and how should SCRRA position itself to respond to these transitions? A series of outreach efforts were conducted to solicit feedback from the broad array of constituents that Metrolink serves – its passengers, the public at large, its partners and stakeholders, its employees, and the Member Agencies who invest in it (represented by its Board of Directors and leadership, and staff at its Member Agencies). The outreach efforts defined the purpose of SCRRA moving forward and what is needed to achieve that purpose.

LISTENING TO THE CUSTOMERS

Public Outreach and Input

A major component of this Strategic Plan was the input received from Metrolink customers, since the goals and visions identified to guide SCRRA over the next 10 years should support not only SCRRA and its Members, but the needs of its customers as well. An outreach campaign was initiated in February 2014 with the release of a public survey that asked five questions:

1. Where do you live? (enter 5-digit ZIP code)
2. Where do you primarily travel on a regular basis? (enter City or 5-digit ZIP code)
3. The one place I wish Metrolink served better is...
4. Over the next ten years, I would like Metrolink to focus on...
5. Do you have any other comments, questions or concerns?

The survey was advertised in the Metrolink newsletter (Metrolink Matters), on the Metrolink website, and through public events in which Metrolink participated. The survey was available for six months. The theme of the outreach campaign was “Our Future is On Track.” **Figure 14** illustrates the results from this survey.

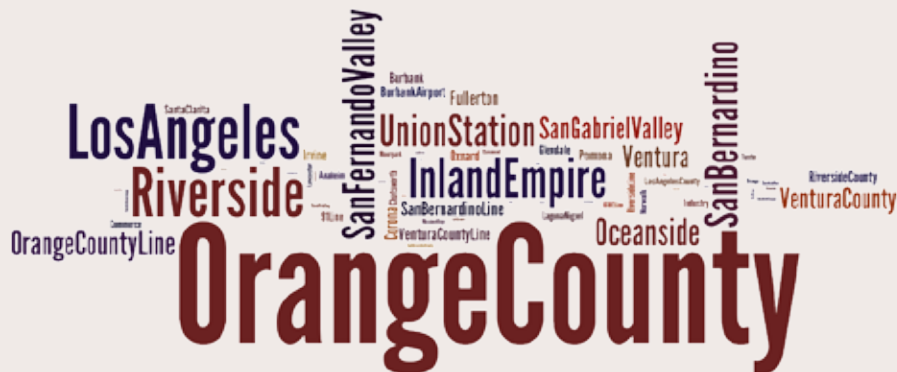
The campaign was supplemented by two workshops with the SCRRA Board of Directors, which were open to the public, as well as a second survey released in December 2014. This second survey solicited input from the public on some of the proposed service scenarios and on the direction of the Strategic Plan (see **Figure 2-1 in the Technical Appendix**).

From the customer surveys received, service frequency and extensions were the most important, followed by more amenities (e.g. use of mobile devices for productivity) and lower ticket prices.

Figure 14: Cloud Diagrams Representing Customer Desires for Focus (2015-2025)



Customers value additional frequency and routes most commonly, followed by lower ticket prices and more amenities.



Customers desired most commonly additional service between Los Angeles and Orange County.



Connectivity to new places, particularly in the South Bay and Westside of Los Angeles County and to San Diego, was desired by most existing or potential customers.

Board and Member Agency Input and Involvement

This Strategic Plan reflects input from the Board of Directors and staff, and leadership from SCRRA Member Agencies. In addition to the public survey, a survey was also circulated to the SCRRA Board Members and Member Agencies. This survey focused on questions regarding governance and collaboration. There were subsequent interviews conducted with each Board member and each Member Agency Chief Executive Officer (CEO). The following major themes were identified:

- **Transportation 101** – Get “back to basics” by focusing on a key set of goals and improving and making the system attractive for the customers with better equipment, continued safe service, service reliability, and reaching out to employers and special event contacts to increase ridership.
- **Finances** – Stability, coordination, transparency, adherence to standard accounting practices, and appropriate staffing.
- **Funding** – The funding formula should be a long-term issue of discussion, but other actions could be explored to access funding.

- **Communication** – Implementation of simple systems and practices to enhance communication, thereby, reestablishing and sustaining trust.
- **Ownership and Culture** – Foster a greater sense of ownership in Metrolink so that it is viewed as a system rather than a series of rail lines. Work on creating a culture that is innovative but still “financially responsible.”
- **Cost-effective actions** – Less focus on big-ticket items and more identification of cost-effective changes that can improve service and/or increase ridership.

The surveys taken by the general public in conjunction with the surveys and interviews of the Board and Member Agencies point to a desire for the service to expand; however, focus must be on the customer, a more rigorous method for ensuring cost-effectiveness and clear communication.

GUIDING PRINCIPLES

The Guiding Principles for SCRRA are rooted in the public responses to the surveys and the major themes from the interviews conducted with each Board Member, TAC members, and staff. The principles reflect the core values and direction for SCRRA over the next decade. These principles were approved by the Board and TAC at the annual workshop on February 28, 2014, and were later quantified in the development of the Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis conducted as part of this Strategic Plan.

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

- 1 Customer Value** – CUSTOMER VALUE focuses on the “value proposition” for riders and what they are getting in return for their fare. Evaluating how customers use, experience, and perceive the Metrolink system is one of the elements to understanding riders’ decisions to use Metrolink or opt for other transportation options.
- 2 Focus** – FOCUS AND DISCIPLINE refers to SCRRA’s ability to “Focus” on managing the growth in the operating costs and Member Agency subsidies, as well as the ability for SCRRA to cost effectively manage the aging capital, new investments, and project delivery of the program priorities set forth by the Member Agencies.

- 3 Connectivity** – CONNECTIVITY is how the Metrolink system fits into the regional transportation framework and connects land use and development. Connectivity will determine how Metrolink can better serve the region.
- 4 Collaboration** – COLLABORATION is key to SCRRA’s role as a Joint Powers Authority and is vital to implementing the Strategic Plan vision. Defining areas of cooperation and coordination will help to fill gaps that might hamper the vision’s implementation.
- 5 Transparency** – TRANSPARENCY is how SCRRA presents information to its Member Agencies and the public. Transparency helps to gain trust and is a way to share information with customers.

For each of these principles, a SWOT analysis was conducted to identify areas of improvement and opportunities to better incorporate these principles into the daily operation of SCRRA. A SWOT analysis is a commonly used tool to help an organization understand its performance as it works to develop a path forward. A summary of the SWOT analysis is presented in **Figure 15** through **Figure 19**. The complete SWOT analysis is provided in the Technical Appendix to this Plan for additional reference.

Figure 15: CUSTOMER VALUE SWOT Analysis Summary

Strengths
<ul style="list-style-type: none"> Ridership has continued to grow over past 10 years. Metrolink On-Time Performance is in-line with other commuter agencies across the country. Service has increased over the last 10 years providing additional service to passengers. Overall customer satisfaction has remained consistent over time at between 3.8 and 4.2 out of 5. Customers currently most satisfied with conductors and parking availability.
Weaknesses
<ul style="list-style-type: none"> Metrolink lacks a defined value proposition for the customer. Delays have increased and include more cancellations of trains then ever before resulting in a regular rider being subject to a cancelled train roughly once every other month. Metrolink's frequency still light compared to other commuter agencies. Ticket issuance problems and gaps in integration hinder ticket sales. TVM complaints have increased nearly 500% in 3 years. Complaints are growing regarding policies.
Opportunities
<ul style="list-style-type: none"> New and rebuilt locomotives should improve On-Time Performance. Ongoing capital investments will support the ability for higher service levels. Several industry peers offer different advanced ticketing options to consider.
Threats
<ul style="list-style-type: none"> Metrolink serves a growing number of low-income riders, threatening ability to raise ticket prices without sacrificing ridership. Ticket sales risks generally associated with TVM fleet. Key customer complaints must be addressed or ridership may suffer.

Figure 16: FOCUS SWOT Analysis Summary

Strengths
<ul style="list-style-type: none"> Increase in total operating costs also driven by increase in service. Farebox revenue growth during periods of no ridership growth shows ability to raise fares. Safety statistics in-line with industry benchmarks. Safe train operation rated high compared to other elements of customer service. Metrolink has decreased mechanical delays in 2014. Recent rehabilitation program addresses weaknesses identified in the 2010 Risk Assessment Analysis.
Weaknesses
<ul style="list-style-type: none"> Operating costs are growing at 7.7% per year, outpacing inflation and faster than its peers. Total operating revenue not keeping pace with costs. Fares are higher then average compared to peer agencies. Locomotive utilization remains low with maintenance repairing more then expected. Capital budgets include large carryovers from previous years.
Opportunities
<ul style="list-style-type: none"> Revisit contract terms of largest operating and maintenance contracts. Targeted fare discounts for price sensitive riders provide revenue and ridership growth opportunities. Development of Fleet Management Plan will combat high spare ratio and other fleet challenges. MAP-21 creates a new focus on transit State of Good Repair and Asset Management. Developing multi-year rehabilitation plans will help manage costs for projects that last more than 1 year.
Threats
<ul style="list-style-type: none"> Contingency fees pose the greatest cost threat in operating contracts. Gap between revenue and cost is expected to grow. Board and Member Agency buy-in required to lead improvements and approve management plans. Member Agency funding constraints may limit ability to better support rehabilitation.

Figure 17: CONNECTIVITY SWOT Analysis Summary

Strengths
<ul style="list-style-type: none"> ▪ Rates of transit transfers are high and critical for completing connections to destinations. ▪ Transfer agreements provide access to many of the major transit systems in the region. ▪ Local Cities and Member Agencies continue to support development of a park-and-ride system for Metrolink. ▪ Customers view the availability of parking at stations favorably. ▪ Recent station area development increases market served by Metrolink. ▪ New intermodal terminals are creating a platform for more effective connections.
Weaknesses
<ul style="list-style-type: none"> ▪ Metrolink is unable to directly reach some concentrated Los Angeles work locations. ▪ Majority of station areas have lagged behind the region in population and employment change. ▪ Metrolink is unable to capture many of the regional commute trips due to short distance of trips. ▪ Metrolink has limited influence over station area development.
Opportunities
<ul style="list-style-type: none"> ▪ New intermodal terminals are creating a platform for more effective connections. ▪ Cooperative partnerships with member agencies can improve bus-rail connections. ▪ Member Agency projects will expand Metrolink directly and improve connections.
Threats
<ul style="list-style-type: none"> ▪ Majority of station parking is at or near capacity. ▪ Metrolink lacks control over parking resources leaving it vulnerable to decisions by Cities that may impact ridership. ▪ Parking & development policies are uncoordinated and subject to priorities of local jurisdictions.

Figure 18: COLLABORATION SWOT Analysis Summary

Strengths
<ul style="list-style-type: none"> ▪ SCRRA JPA structure reflects regional consensus. ▪ Member Agencies developed and agreed on cost allocation formulas, which are applied correctly. ▪ Railroads and SCRRA maintain a healthy operating relationship. ▪ Relationship with local law enforcement strong.
Weaknesses
<ul style="list-style-type: none"> ▪ Metrolink funding formulas outdated. ▪ Lack of trust exists between SCRRA and Member Agencies. ▪ Security rating by customers has decreased over time. ▪ Security constrained by funding sources and inconsistent decision-making. ▪ 2013 FTA Triennial Review identified several security oversights.
Opportunities
<ul style="list-style-type: none"> ▪ SCRRA can improve relationship with Member Agencies in key areas of budgeting and accountability. ▪ Network integration efforts led by the State of California can help Metrolink attract new riders and improve connections and customer satisfaction. ▪ Improved collaboration with new LOSSAN JPA and Pacific Surfliner service. ▪ Agreements with CA High-Speed Rail Authority can lead to additional funding for local connectivity projects.
Threats
<ul style="list-style-type: none"> ▪ Behavioral threats, lack of clarity, and ignoring regional responsibility could exacerbate mistrust between SCRRA and Member Agencies. ▪ Weaknesses in the negotiating approach with freight railroads could lead to cost risks to the SCRRA and Member Agencies. ▪ Expansive nature of Metrolink infrastructure remains a threat to maintaining security coverage.

Figure 19: TRANSPARENCY SWOT Analysis Summary

Strengths
<ul style="list-style-type: none"> Processes for performance reporting have been established and Member Agencies have online access to key reports. Metrolink has a robust social media presence.
Weaknesses
<ul style="list-style-type: none"> High Agency staff turnover since April 2010. Service and convenience around obtaining delay information rated poorly by customers. Institutional framework needs clearer delineation of roles.
Opportunities
<ul style="list-style-type: none"> A data warehouse can automate collection and dissemination of data for performance reporting. Positive Train Control (PTC) provides new data that will benefit Metrolink and its customers. New technologies provide potential platforms for sharing real-time information on trains.
Threats
<ul style="list-style-type: none"> Lack of internal cohesion between Board and staff undermines SCRRRA's ability to improve performance.

MISSION, VISION & VALUES

SCRRRA's Mission, Vision, and Values are at the heart of this Strategic Plan and are the foundation upon which the goals and strategies outlined in this Plan were defined around. The **MISSION** of SCRRRA, as proposed by the Board of Directors and refined with input from SCRRRA staff is:

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

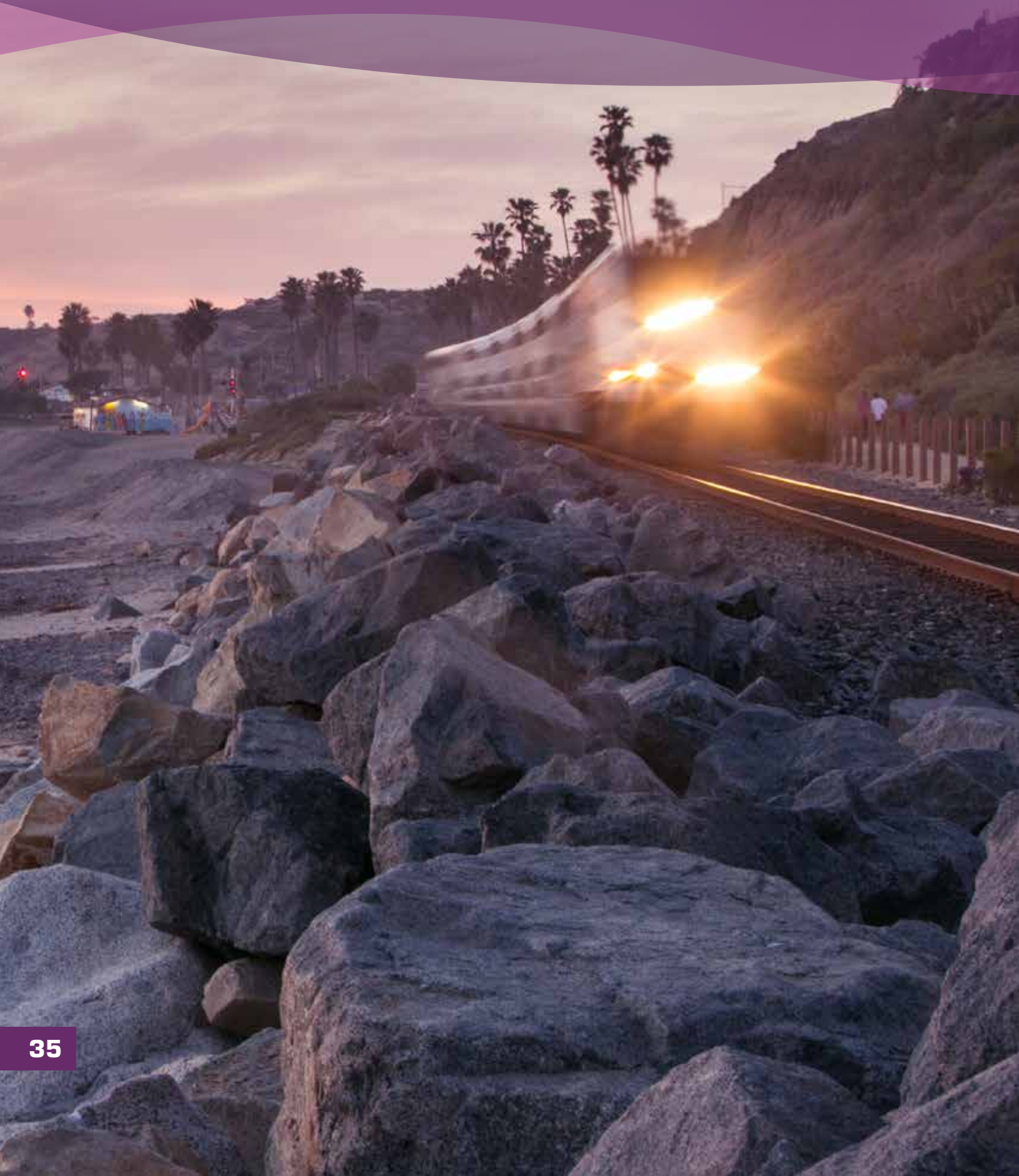
The **VISION** for Metrolink is:

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

The SCRRRA **VALUES** are:

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

A Strategy in Two Parts



A STRATEGY IN TWO PARTS

Where most transit agency Strategic Plans focus on only how the system will grow, This Strategic Plan focuses on two aspects.

1. How to strengthen the core of the Metrolink organization and system.
2. How the system may grow.

For this reason, the strategy is presented in two parts.

METROLINK STRATEGY – PART I

Focus on Strengthening the Core of SCRRA

To restore and sustain the performance of the system, it is critical to focus on strengthening the core of the Metrolink system and organization. Stakeholders overwhelmingly called for a “back to basics” approach for all Metrolink’s functions. This approach is advanced through seven goals. The goals reflect institutional investments in each of the defined core areas together as part of an overall program to move SCRRA forward and allow it to grow to meet the needs of its customers.

The following Agency goals have been identified and are described in more detail below:

- Goal 1: Ensure a Safe Operating Environment
- Goal 2: Maintain Fiscal Sustainability
- Goal 3: Invest in People and Assets
- Goal 4: Retain and Grow Ridership
- Goal 5: Increase Regional Mobility
- Goal 6: Improve Communications to Customers and Stakeholders
- Goal 7: Improve Organizational Efficiency



Goal 1: Ensure a Safe Operating Environment

Safety continues to be a priority goal for the SCRRA organization and Metrolink system. SCRRA staff continues to focus on the recommendations from the 2009 Metrolink Enhanced Safety Action Plan and its subsequent updates, focused on the following eight safety issues:

- Safety Culture
- SCRRA Organizational Structure
- System Safety Program Plan
- Safety Performance Measurements
- Infrastructure Maintenance
- Analysis of Metrolink Short-Term Safety Projects
- Strategic Plan
- Governance

Goal 2: Maintain Fiscal Sustainability

Over the past 10 years, SCRRA's operating costs have increased an average of seven percent each year as of the end of fiscal year (FY) 2013, shown in year of expenditure (YOES). This translates into a growth of nearly 100 percent since FY 2004 (see **Figure 20**).

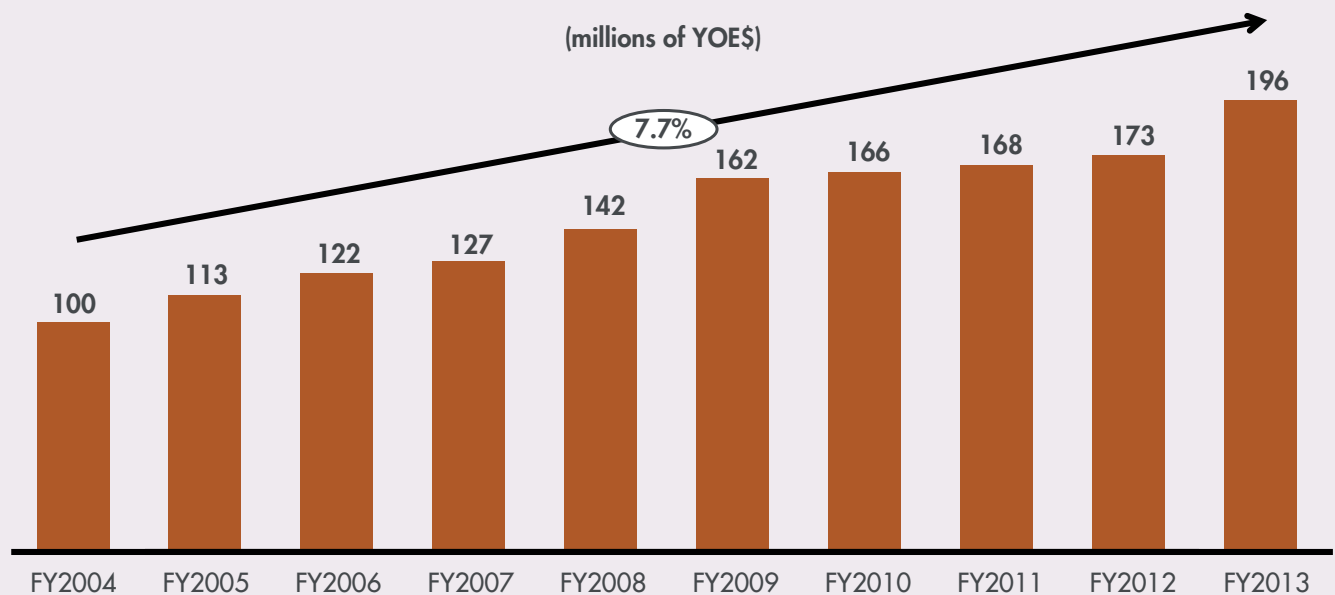
Operating cost growth is growing faster than any benchmarked agency and is nearly double the industry average.

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 SCRRA's sole source of operating funds currently being provided by fare revenue and its Member Agencies through their net subsidy obligations, this rate of growth threatens to limit the ability of these agencies to fund any future growth and improvement in the system. For this reason, the stabilization of the operating cost growth rate is seen as a core institutional need for SCRRA to address in the immediate term.

As laid out in both the SWOT analysis and Cost & Budget Assessment, the largest contributors currently to the operating budget growth rate include:

Figure 20: Operating Cost Growth (FY04-14)



- Operating contracts (the “Big Five” contracts): Train operations, Vehicle maintenance, Right-of-way / Maintenance-of-Way, Security, Signals, and Communication
- Fuel Costs
- Risk Management and Insurance
- General Inflation (except fuel)

Some of the factors contributing to the high growth rate are based on multi-year fixed agreements and can be difficult to address in the immediate term.

Next steps for consideration in achieving fiscal sustainability moving forward include:

- Develop documentation defining how annual labor rates are negotiated and include in contract bid packages for contractor compliance
- Focus on upcoming renewal of “Big Five” contracts and automatic annual increases
- Improve benchmarking of costs to better understand where Metrolink underperforms
- Eliminate contingency fees on operating contracts that do not reflect actual expenditures in the performance of the services
- Rigorously enforce the liquidated damages associated with not meeting the performance elements outlined within each contract to help improve overall system performance
- Consider strategies such as Fuel Hedging to stabilize fluctuations in fuel expenses
- Review risk management and insurance costs to ensure increases are in-line with market
- Continue to capitalize on new safety improvements such as Positive Train Control (PTC) and Crash Energy Management (CEM) to help reduce the annual operating liability insurance premiums
- Continue to focus on systemwide safety improvements to reduce the overall cost associated with claims

Goal 3: Invest in People and Assets

Retaining institutional knowledge is critical to understanding how to move forward in growing and improving SCRRA. Currently, SCRRA has limited succession planning for retaining this knowledge as seasoned staff departs SCRRA; therefore, much of this institutional knowledge is lost. SCRRA should develop the internal processes to retain this internal expertise.

Several key strategies should be evaluated for investing in SCRRA staff and in developing a succession plan, which include:

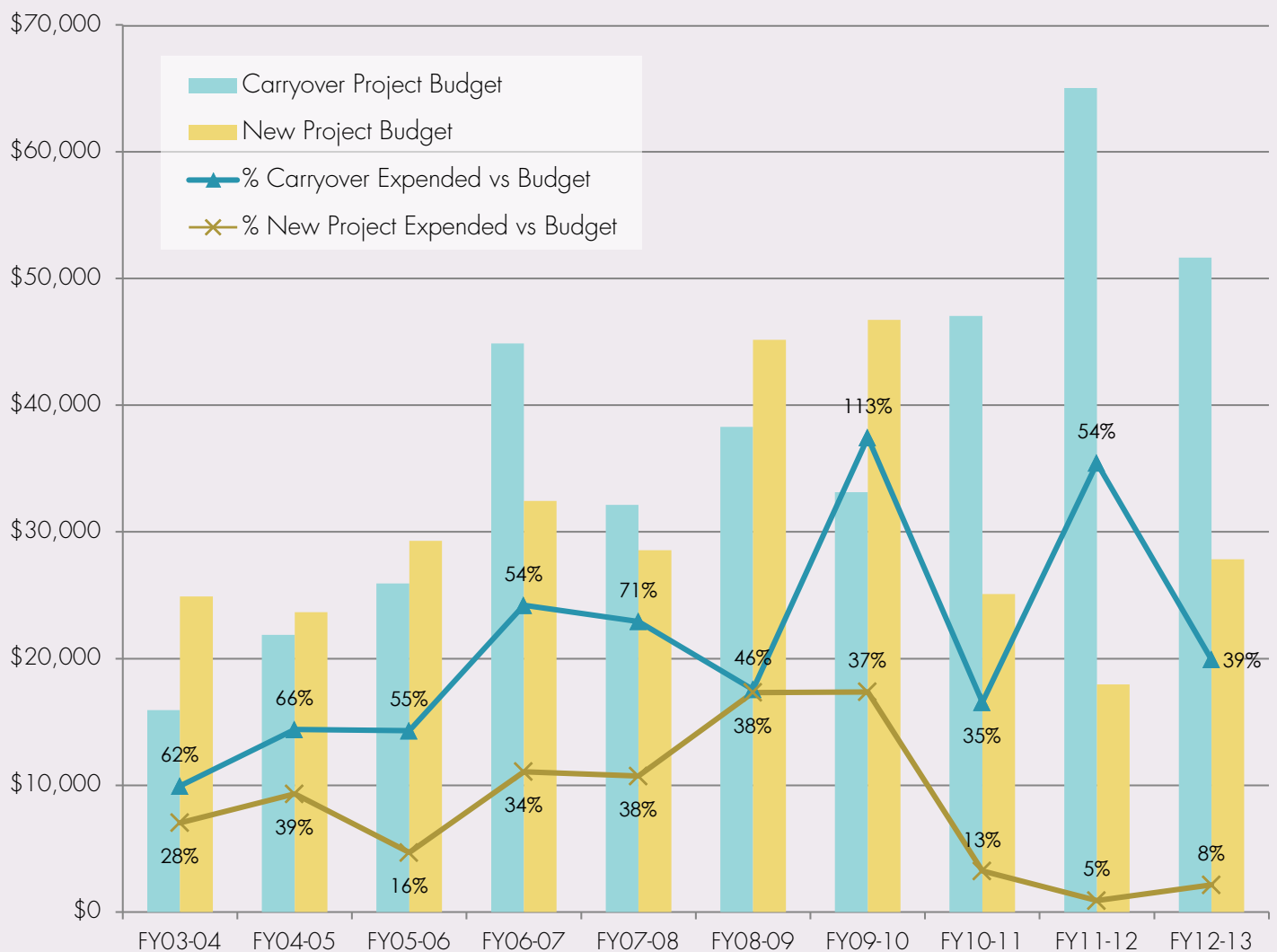
- Develop business processes and standard operating procedures for day-to-day operations that can lead to proper documentation and easy transfer of knowledge and practices to staff and contractors
- Develop written transition and succession plans to pass on valuable knowledge for key positions within each discipline
- Define an apprenticeship process for those positions most sensitive to the loss of institutional knowledge
- Institute internal programs to promote knowledge sharing between departments
- Develop a management training program to help with development of staff within SCRRA
- Help staff identify career opportunities within SCRRA and encourage advancement to help retain institutional knowledge
- Ensure SCRRA Board orientation includes training in the California Brown Act and California Public Records Act, Ethics training under AB1234, Form 700, and the State mandated sexual harassment training

Investing in Metrolink assets by replacing and upgrading infrastructure before it reaches its useful life is essential for a safe and reliable commuter system. Over the past five years, SCRRA has not made an effective case to its Member Agencies to fund the proposed rehabilitation budget. Since FY 2012, SCRRA’s annual rehabilitation budget has been 100 percent funded with Member

Agency federal funds (LACMTA annual rehabilitation contribution is local funded, but swapped with VCTC federal funding). The Federal Transit Administration (FTA) Moving Ahead for Progress in the 21st Century Act (MAP-21) requires transit agency rehabilitation expenditures to be at a "state of good repair" (SOGR) level. SOGR means that all assets are well within their useful life and there is no deferred maintenance. In the past, rehabilitation projects received FTA pre-award authority and started once the annual budget had been approved by the SCRRA Board. This allowed projects to incur expenditures while the FTA grant approval process was proceeding.

In 2011, due to SCRRA cash flow problems not related to the rehabilitation budget, SCRRA opted not to use pre-award authority. This helped the cash flow but delayed projects until the FTA grants were approved, which was often eight to nine months into the fiscal year. Since FY 2012, this administrative delay has become one of the primary reasons annual rehabilitation budgets "carryover" year after year (see **Figure 21**). Many rehabilitation projects are multi-year in nature. Infrastructure and rolling stock projects can take years to complete under the best of circumstances. Non-infrastructure projects such as Oracle upgrades and signage projects are multi-year. Rehabilitation

Figure 21: Rehab Annual Expenditures vs. Carryover and New Programmed Budget (\$000)



projects are forced into an annual program due to the annual budget process. This has also led to significant carryovers year after year. Factors that have contributed to carryover have included the need to divert staff resources to meet mandated safety requirements.

More prudent financial management requirements include having all cash in hand at the start of projects, whereas time lags occur due to FTA funding availability after projects begin. These issues are currently being addressed in reforms to project development processes.

Next steps for consideration in investing in assets include:

- Quantify Metrolink “state of good repair” for Member Agencies
- Ensure that the Member Agencies are informed of 1) any assets that are not in a SOGR backlog, 2) the rehabilitation expenditure necessary to eliminate the backlog, and 3) the exposure if investment is deferred
- Work with Member Agencies to obtain working capital
- Utilize pre-award authority from the FTA for annual rehabilitation projects
- Transmit multi-year rehabilitation budget to the Member Agencies each year, along with the operating budget to secure multi-year commitments and reduce rehabilitation carryovers

Goal 4: Retain and Grow Ridership

Metrolink has not seen a lasting resurgence in ridership following the end of the economic recession, despite increasing gas prices, which has caused transit ridership overall nationally to grow. While the Strategic Plan process is taking the first step in evaluating the potential causes for the stagnation in ridership, SCRRRA should define a process for continually reviewing and diagnosing ridership trends to identify ongoing or potential issues that have or may cause further decline.

Several key strategies that can help in evaluating the cause of stagnated ridership and the potential for growth moving forward include:

- Launching a ridership and revenue initiative,

refining a more comprehensive marketing plan

- Updating origin-destination surveys
- Developing a policy for conducting and evaluating periodic pilot programs

Reliability and on-time performance are important metrics that relate directly to customer experiences and the ability to retain existing and attract new riders. To help address this, the metrics used to measure the performance of the system should be better aligned to reflect the customer needs and experiences. A formal and documented strategy for reducing cancellations / annulments while maintaining overall on-time performance is required. In addition to on-time performance (OTP), other metrics that warrant further review and attention include tracking customer complaints and response/resolution, and reporting on signage reliability and lessons learned.

Potential next steps for addressing how to retain and grow ridership that will be considered include:

- Regularly identify and track service competition to identify areas of potential ridership decline
- Develop a focused marketing strategy to mitigate any impact to ridership due to pricing, travel time or travel frequency
- Partner with different transit agencies to create a more user-friendly and convenient service for customers
- Develop a more comprehensive marketing plan that is continually updated in coordination with Member Agencies
- Distribute the marketing plan to Member Agencies for reference
- Highlight areas of potential ridership growth for the service and lay out a target strategy for marketing those areas
- Develop marketing partnerships with Member Agencies with roles and responsibilities for each agency clearly defined
- Update origin-destination surveys regularly to provide more up-to-date and accurate information in tracking the needs of customers

- Develop a policy for conducting and evaluating periodic pilot programs, based on market research, which might help promote ridership (e.g. fare structure adjustments, such as premium fares on express trains)
- Adjust on-time performance metrics to review OTP at all stations, not just terminals
- Develop customer-centric metrics, such as passenger delay minutes to be used as a metric of OTP
- Provide the Board/CEO/TAC a summary of recurring customer complaints and subsequent responses (indicating response time, understanding customer request/need, and providing adequate solutions)
- Report on the reliability of customer signage at stations and onboard trains
- Report on the customer feedback and lessons learned from delays experienced by customers from incidents with significant delays, annulments, and cancellations
- Improve plans to solicit better community feedback and participation in Board decisions/hearings

Goal 5: Increase Regional Mobility

Metrolink is the largest region-wide transit system, providing connectivity and travel options between six Counties in Southern California. However, most population and employment centers are not near a station. Metrolink's service covers just 55 percent of employment locations in Southern California. Within three miles of a Metrolink station lives 28 percent of the region's population and 30 percent of the region's employment (2012). There is considerable ridership potential. Based on its current network, Metrolink could potentially serve up to 13 percent (or 863,000) of all commute trips – both origin and destination are within catchment areas.

In addition, nearly half of Metrolink riders depend on transit transfers to complete their trip, with the car being the second most popular mode. Transfer agreements provide access to many of the major transit systems in the region, but still lack the convenience many

passengers are looking for in their daily travels, in particular in providing access to their origin station.

Potential next steps for addressing how to improve regional mobility that will be considered moving forward include:

- Utilize future demographic and employment growth around stations to project ridership forecasts
- Identify opportunities to serve more commute trips
- Pursue and enhance partnerships with local transit operators, mobility providers, and rideshare services to promote first mile/last mile transit service
- Leverage Advanced/Electronic Fare Collection systems to promote regional transit integration (mobile ticketing and open payment systems)
- Seek out ways to support station area development
- Enhance collaboration with existing and future passenger rail services (e.g., LOSSAN)

Goal 6: Improve Communications to Customers and Stakeholders

The customer is the foundation for Metrolink, which provides a reliable, comfortable, and affordable transportation option in the region. Ensuring SCRRRA is in tune with Metrolink passengers' concerns and needs is critical to maintaining and growing ridership.

Communications to customers are a key driver of customer satisfaction. Some of the most critical issues for passengers are the quick and efficient communication of information regarding train status and responsiveness to complaints.

Responsiveness to questions and complaints has improved over the past couple of years; however, it is still one of the most frequent complaints among passengers. Several key strategies should be evaluated to help improve customer communications and responsiveness, which include:

- Explore new methods to provide train delay information to customers

- Evaluate potential of new technology platforms as a way to engage existing and potential customers
- Improve transparency by reporting performance data online to customers and stakeholders
- Develop and implement methods to increase stakeholder engagement

Goal 7: Improve Organizational Efficiency

As SCRRA has grown over the past 23 years and, in particular, over the past five years, Member Agencies have assumed increasing responsibilities related to capital project design and construction, marketing, security, and service planning. No documentation, however, has been prepared to formalize the specific responsibilities between SCRRA departments and how they interface on projects and with the Member Agencies. A lack of clear definition in the roles and responsibilities can lead to confusion as to which department is responsible for what and can result in either the duplication of efforts, miscommunication with a Member Agency or stakeholder group, or a delay of a task or project, thereby increasing overall costs.

SCRRA would benefit from identifying areas where roles and responsibilities need to be clarified and defined. Several key strategies should be evaluated and include, but are not being limited to:

- Identify areas where roles and responsibilities need to be clarified and defined
- Define clear lines of communications between departments and document the roles and responsibilities for reference by all parties
- For coordination outside SCRRA, develop a process for securing agreement for what types of functions SCRRA or the Member Agencies should take responsibility
- Define the process for executing MOUs with Member Agencies that summarize the roles and responsibilities between SCRRA and Member Agencies for specific tasks or projects, as well as between Member Agencies for issues related to Metrolink

There remains a significant concern regarding coordination between SCRRA and its Member Agencies and Board Members and the transparency of information provided for decision-making. The success of any agency is based on trust and communication between agency staff and its Board, as well as between an agency and its funding partners. Several key strategies should be evaluated to help improve the coordination and transparency between agency staff and the Board and TAC members, which include:

- Develop a process for the management of Board materials and presentations that includes a look-ahead of future Board topics and review of Board items
- Strengthen the relationship between SCRRA staff and management and the TAC and Member Agency CEOs to develop more Member Agency trust.
- Ensure that the SCRRA CEO attends regular TAC meetings and interface with the TAC members on concerns and solutions
- Communicate with TAC and Member Agency CEOs individually on a regular basis by SCRRA management
- Ensure that SCRRA Board Members update their respective Member Agency Boards on a regular basis regarding the status of SCRRA
- Sustain education and training for Board Members and ensure continued compliance with ethics and other rules

METROLINK STRATEGY – PART II

Accommodating Growth and Reaching Markets

Continuing the “back to basics” approach, part two of Metrolink’s strategy emphasizes growth at a measured and moderate pace following SCRRA’s guiding principle of focus and discipline. Growth is a result of a stable and efficient rail operation with steady or rising ridership and improved performance. Growing service at a moderate pace includes significant emphasis on increasing reliability of the system with better travel time reliability and increased frequency of service, not only for traditional peak period commutes, but also midday and evening service.

As any specific plan for growth requires the consent and commitment of its Member Agencies, this Strategic Plan presents scenarios of growth as illustrations of what resources may be required. At this time, since the core of the Metrolink strategy focuses on fixing the core of Metrolink services as an important step before multi-year commitments can be contemplated by Member Agencies, no explicit commitment to growth is suggested in this Strategic Plan.

These scenarios for growth explored and presented here focus on 2025 service objectives. Each scenario was evaluated to develop estimates of ridership, capital, and operating costs. Each scenario can be also seen as complementary and cumulative to each other.

Service Growth Scenarios

The scenarios evaluated in this Strategic Plan include:

- **No Service Growth Scenario**
- **Scenario 1:** Enhancement of Existing Network
- **Scenario 2:** Overlay of Additional Service Patterns
- **Scenario 3:** High-Speed Rail Service Integration

No Service Growth Scenario

The No Service Growth Scenario represents a “No-Build” scenario between an existing base line condition (2015) and future condition (2025). This scenario assumes no significant change in the level or extent of Metrolink service over the next 10 years and is the scenario against which each of the other growth

scenarios are compared. The ridership estimates for this scenario reflect only organic growth based on population and employment growth in the region. The service assumptions are based on the projected service that is planned to be in operation as of December 2016, with the implementation of the service extension to South Perris in Riverside County and to the E Street Transit Center in San Bernardino.

Scenario 1: Enhancement of Existing Network

The Enhancement of Existing Network Scenario represents a managed growth scenario based on feedback from Member Agencies of service assumptions they believe could be realistic to fund over the next 10 years. The growth for each line was validated against projected market growth along each corridor and refined based on Member Agency input. This scenario focuses on enhancing midday and evening services, addressing the need for additional reverse peak service, the maturity of the Perris Valley Line, the introduction of a new Placentia station in Orange County and a new Hollywood Way/Burbank Airport station in Los Angeles County. It also includes the Eastern Maintenance Facility (EMF) in Colton for regular maintenance of the fleet as well as the development of additional maintenance facility in outlying areas, such as Southern Orange County Riverside County, and the Antelope Valley.

Scenario 2: Overlay of Additional Service Patterns

This scenario builds upon the improvements in service included in Scenario 1. Scenario 2 is the combination of two sets of service improvements that were analyzed separately and then combined into a single, integrated scenario. The first set of services (Scenario 2A) provides increased frequency of service in both directions of travel on segments of core Metrolink lines (e.g. Los Angeles to Chatsworth, additional express on the San Bernardino Line, etc.). The second set of services (Scenario 2B) entail physical extensions of the Metrolink network, expanding its geographic reach within the greater Southern California region.

Scenario 3: High-Speed Rail Service Integration

This scenario is aimed at maximizing the potential of the Metrolink network to feed and distribute trips to and from the California High-Speed Rail (HSR) line upon its completion from the Central Valley and Bay Area to its interim terminus in the San Fernando Valley at Burbank. It builds off of Scenario 1 and does not include the line extensions considered in Scenario 2, except for the extension of Orange County service from Oceanside to San Diego. Direct service is provided from Newhall through Burbank and Union Station to the Metrolink lines to the southeast of downtown Los Angeles, including the Riverside, Orange County, and 91 Lines.

Southern California Regional Interconnector Project

LA Metro, in collaboration with stakeholder partners (including Metrolink), is currently designing the Southern California Regional Interconnector Project (SCRIP). This future project will allow trains to operate through Union Station from the northern lines in the Metrolink network (e.g., the Antelope Valley line and the Ventura County line) to the southern lines (e.g., the Orange County line and the 91/Perris Valley line) enabling one-seat ride trips along a corridor that extends from Burbank to

Fullerton at high frequencies. As currently envisioned, this project will allow all lines (including the San Bernardino line and the Riverside line) to reduce their dwell times at Union Station, improving travel times, and reducing operating costs significantly. This creates a significant ridership attraction opportunity for the Metrolink network. All of the scenarios defined in this Strategic Plan include enhanced connectivity of services enabled by SCRIP.

Projected Growth

The weekday and weekend service levels for each scenario, as identified in **Table 1** and **Table 2**, presents the estimated number of total daily trains on each service line in 2025, compared with 2015 service levels, which represent the No Growth scenario. For each of the scenarios, a further breakdown of service levels by time of day and by direction of travel was generated. This more detailed service specification was used as the basis for developing hypothetical weekday timetables for each scenario, which in turn were used to determine infrastructure requirements for increasing railroad capacity, to estimate rolling stock fleet requirements, and to generate ridership and operations and maintenance cost estimates.

Table 1: Summary of Potential 2025 Weekday Growth by Scenario (Total Trains)

Line	No Service Growth	Scenario 1: Enhancement of Existing Network	Scenario 2A: Overlay of Add'l Service Patterns	Scenario 2B: Overlay Plus New Route Extensions	Scenario 3: High-Speed Rail Service Integration
Ventura County (includes Burbank Turns)	31	41	51	51	51
Antelope Valley	30	40	48	48	62
San Bernardino	38	48	48	48	48
Riverside	12	22	22	22	22
Orange County (include OC Local)	29	35	41	41	46
91/Perris Valley	9	23	23	23	23
Inland Empire-Orange County	16	28	28	28	32
New Services	-	-	-	60	-
TOTAL	165	237	261	321	284
% Growth Over No-Service	--	44%	58%	95%	72%

Table 2: Summary of Potential 2025 Weekend Growth by Scenario (Total Trains)

Line	No Service Growth	Scenario 1: Enhancement of Existing Network	Scenario 2: Overlay of Additional Service Patterns	Scenario 3: High-Speed Rail Service Integration
Ventura County	-	-	-	-
Antelope Valley	12	16	16	26
San Bernardino (Saturday)	20	26	26	26
San Bernardino (Sunday)	14	20	20	20
Riverside	-	-	-	-
Orange County	8	10	10	12
91/Perris Valley	4	8	8	8
Inland Empire-Orange County	4	8	8	8
New Services	-	-	20	-
TOTAL	42-48	62-68	82-88	74-80
% Growth Over No-Service	--	42-48%	83-95%	67-76%

Each growth scenario requires investment in additional track capacity, primarily for double-tracking portions of lines that currently have only a single track, which can include 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 more balanced travel options throughout the day. Several infrastructure projects have been identified for improving rail system capacity. These are listed in **Table 3** and include previously-identified projects as well as a limited number of additional locations where the need for additional main track were identified during the course of developing hypothetical train schedules for the three growth scenarios. The process of developing and then optimizing the train schedules provided the means to assess the usefulness of the alternative infrastructure projects and evaluate and prioritize them.

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 already identified or planned infrastructure projects. By adopting regular schedule patterns, it was possible in most cases to concentrate multiple meets at the same locations throughout the day.

The results of this analysis are shown in **Table 4**, which groups infrastructure projects into three priority categories for each of the three growth scenarios. The top category, Priority 1, includes locations where multiple meets occur and where extending double tracking, or lengthening, or constructing sidings is essential to the operational feasibility of the service plan in the identified scenario. Priority 2 projects are less critical, generally only used for meets once or relatively few times during the day. With more detailed scheduling analysis, it might be possible to adjust the frequency and timing of reverse-direction service and shift scheduled meets to adjacent double track sections and, thereby, defer or avoid having to construct these projects. Priority 3 projects are not required to deliver the scheduled service as outlined in the hypothetical schedules. They potentially offer improved service reliability and scheduling flexibility, but it is assumed that these projects could be implemented

in a later phase of development, as demand builds for increased service beyond 2025 or if travel patterns change. **Figure 23** shows the infrastructure projects in relation to the Metrolink system map.

It is important that alternatives are continually identified and reviewed that could increase capacity or service options at an overall lower infrastructure investment. This Strategic Plan aims to define a strategy for increasing system capacity through both capital investment and improvements in operational efficiency.

The strategy as identified includes four key components:

- Enhancing Infrastructure (including capital projects)
- Evaluating Shared-Use Agreements
- Refining Operations and Maintenance (O&M) Practices
- Optimizing Fleet Usage (to include alternative technologies)

Enhancing the physical infrastructure focuses on expanding the track and station capacity to allow additional and more frequent service and improve on-time performance. Examples of this are summarized in **Table 3**.

The strategy also involves evaluating the existing shared-use agreements. Exploring the potential for modifying existing shared-use agreements with the freight railroads

can allow for additional service, the identification of alternative or additional alignments (e.g. use of the Union Pacific Alhambra Subdivision), and use of shorter trains, buses, or other types of technologies (e.g. Diesel Multiple Units) to fill in midday or off-peak service gaps. These same services could also be utilized as a precursor to test or grow potential ridership in anticipation of future train service and help to refine the O&M practices and optimize fleet usage.

Refinement of O&M practices requires an overall look at how the train crews are utilized and the equipment is maintained. The goal being to identify solutions for reducing overall hours of service for train crews and shifting primary maintenance cycles for equipment to the overnight hours. These solutions can help to improve overall safety as well as provide additional equipment for enhancing daytime operations within the available fleet.

One important capital project not defined in **Table 4**, but critical to the service growth of the region is SCRIP (see **Figure 22**). This project is so large in scale, that it stands alone as an infrastructure expansion project. This project is estimated to increase the capacity of each platform track that is modified by 300 percent (from an average of two trains per hour currently, to approximately six trains per hour). This project represents one of the most transformative opportunities for operating cost efficiency and service improvement.

Figure 22: Conceptual Design for the Southern California Regional Interconnector Project



Table 3: 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	Via Princessa to Vincent Grade Double Track	AVL	Double track the portion of the AVL through the canyon
Los Angeles	Santa Clarita to Via Princessa Double Track	AVL	Double track of the segment of the AVL.
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 / 91L	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 / 91L	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	3- mile double track on the San Gabriel Subdivision from CP Lilac to CP Rancho
San Bernardino	CP Rancho to CP San Bernardino Junction	SBL	Add a second track over the flyover into San Bernardino
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
San Bernardino	CP Beech to CP Locust Double Track	SBL	3-mile double track on San Gabriel Subdivision from CP Beech to CP Locust
San Bernardino	CP Rochester to CP Nolan Double Track	SBL	San Bernardino Line feeder to HST system
Los Angeles	CP Amar to CP Irwin Double Track	SBL	
Los Angeles	CP Barranca to CP White Double Track	SBL	
Orange	Laguna Niguel to San Juan Passing Siding	OCL / IEOC	The project is the addition of 1.8 miles of new passing siding track
San Diego (SANDAG)	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
San Diego (SANDAG)	CP Eastbrook to CP Shell Double Track	OCL / IEOC	Second Main track and Replacement of the San Luis River bridge
San Bernardino	CP Rana to CP SB Jct. Double Track Shortway	IEOC	San Bernardino Line feeder to HST system
Additional Projects Needed to Support Strategic Plan Growth Scenarios			
San Bernardino	Redlands to New York Street Double Track	SBL	Double Track Between Downtown Redlands and New York Street
San Bernardino	CP Jordan to CP Freemont Double Track	SBL	Siding Extension
Riverside	CP Eastridge to CP Nuevo Double Track	91L	Double Track
Riverside	CP Highgrove to CP Riverside Fourth Track (BNSF)*	91L	Fourth Main Track
Riverside	CP Highgrove to CP Eastridge Double Track	91L	Double Track
Riverside	CP Nuevo to South Perris Double Track	91L	Double Track
Los Angeles	El Monte to Los Angeles (UPRR)	SBL	Use of Alhambra Subdivision as option in addition to San Gabriel Subdivision

* To be constructed by the BNSF Railway should OTP for Perris Valley Line trains fall below 95% as stated in the Perris Valley Line Agreement between the BNSF Railway and RCTC dated November 2, 2012.

Table 4: Track Capacity Improvement Priorities

Project ID	County(s)	Project	Line(s)	Scenario 1: Enhancement of Existing Network	Scenario 2: Overlay of Additional Service Patterns	Scenario 3: High-Speed Rail Service Integration
A	Los Angeles	CP Raymer to CP Bernson Double Track	VCL	1	1	1
B	Los Angeles	CP Brighton to CP Roxford Double Track	AVL	1	1	1
C	Los Angeles	Via Princessa to Vincent Grade Double Track	AVL	2	2	2
D	Los Angeles	Santa Clarita to Via Princessa Double Track	AVL	3	3	3
E	Los Angeles	Santa Clarita to Newhall Double Track	AVL	1	1	1
F	Los Angeles	CP Coyote Creek to CP Valley View Third Track (BNSF)	OCL / PVL	1	1	1
G	Orange/Riverside	CP Fullerton Junction to CP West Riverside Third Track (BNSF)	OCL / PVL	1	1	1
H	Riverside/ San Bernardino	CP West Riverside to CP Rana Third Track (BNSF)	IEOC	2	1	1
I	San Bernardino	CP Lilac to CP Rancho Double Track*	SBL	1 / 3*	1	1
J	San Bernardino	CP Rancho to CP San Bernardino Junction	SBL	2	1	2
K	San Bernardino	CP Central to CP Archibald Double Track*	SBL	1	1	1
L	San Bernardino	CP Beech to CP Locust Double Track	SBL	1	1	2
M	San Bernardino	CP Rochester to CP Nolan Double Track	SBL	1	1	3
N	Los Angeles	CP Amar to CP Irwin Double Track	SBL	2	1	1
O	Los Angeles	CP Barranca to CP White Double Track*	SBL	2	2	2
P	Orange	Laguna Niguel to San Juan Passing Siding	OCL / IEOC	2	2	2
Q	San Diego	CP San Onofre to CP Pulgas Double Track (Stage 2)	OCL / IEOC	1	1	1
R	San Diego	CP Eastbrook to CP Shell Double Track	OCL / IEOC	2	2	2
S	San Bernardino	CP Rana to CP SB Jct. Double Track Shortway	IEOC	3	3	3
Additional Projects Needed to Support Strategic Plan Growth Scenarios						
T	San Bernardino	Redlands to New York Street Double Track	SBL	N/A	1	N/A
U	San Bernardino	CP Jordan to CP Fremont Double Track	SBL	1	N/A	N/A
V	Riverside	CP Eastridge to CP Nuevo Double Track	PVL	2	1	2
W	Riverside	CP Highgrove to CP Riverside Fourth Track (BNSF)	PVL	2	1	2
X	Riverside	CP Highgrove to CP Eastridge Double Track	PVL	3	2	3
Y	Riverside	CP Nuevo to South Perris Double Track	PVL	3	2	3
Z	Los Angeles	El Monte to Los Angeles (UPRR)	SBL	2	1	2

1 Priority 1 — Required for operation of the service plan

2 Priority 2 — Potentially avoidable or deferrable to a later phase of development

3 Priority 3 — Not required for normal service; provides potential future reliability and flexibility

* 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.

Figure 23: Comprehensive Map of Track Capacity Improvement Priorities



Table 5 summarizes the rolling stock fleet requirements for the No Build and Growth Scenarios 1 through 3. 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 spare ratio for locomotives and cab cars and 10 percent spare ratio for coaches to enable ongoing maintenance of the fleet. The No Service Growth scenario maintains existing service levels. The other three

scenarios grow the total number of trainsets needed to operate the estimated revenue trains by between 26 percent and 59 percent. The high end of the range includes the multiple extensions of service that are analyzed as part of Scenario 2, the Overlay scenario.

The overall fleet growth requirements presented below under Scenario 1 are consistent with the fleet requirements presented in the 2015 Metrolink Rail Fleet Management Plan, adopted by SCRRA Board of Directors in February 2016.

Table 5: Growth in Revenue Trainsets and Fleet Requirements, by Scenario (2025)

Line	No Service Growth*	Scenario 1: Enhancement of Existing Network	Scenario 2: Overlay of Additional Service Patterns	Scenario 3: High-Speed Rail Service Integration
Revenue Trainsets – Existing Metrolink Lines				
Ventura County Line	4	6	7	6
Antelope Valley Line	6	8	8	9
San Bernardino Line	8	9	11	11
Riverside Line	4	6	6	6
91 / Perris Valley Line	4	6	7	7
Orange County Line	5	7	7	10
IEOC Line	6	7	7	7
Stored Overnight in Los Angeles	2	-	-	-
Subtotal	39	49	53	56
Revenue Trainsets – Potential New Route Extensions				
East Ventura-North Goleta	-	-	3	-
Ontario Airport/Redlands	-	-	6	-
Subtotal	--	--	9	--
TOTAL	39	49	62	56
Fleet Requirements (including 15% spare ratio for locomotives and cab cars / 10% spare ratio for coaches)				
Locomotives	55	57	72	65
Cab Cars	57	57	72	65
Coaches	201	219	257	n/a

* Total number of locomotives, cab cars, and coaches based on existing fleet availability and not tied to a 10% spare ratio calculation.

Projected Ridership

A ridership analysis was conducted by the Southern California Association of Governments (SCAG) on the No Service Growth as well as Scenarios 1 and 2 using the 2012 Regional Transportation Plan (RTP) calibrated regional model. Information from the latest California High-Speed Rail Authority (CHSRA) ridership analysis was not available at the time of the ridership analysis. Without this information, a ridership analysis could not be conducted on Scenario 3 utilizing the SCAG regional model.

The results of the ridership analysis, as shown in **Figure 24**, suggest nominal systemwide growth over the next 10 years under the No Service Growth scenario, reflecting an increase of only 9.9 percent. More moderate growth is projected for Scenario 1 with an increase in ridership of 19.9 percent over existing 2015 daily boardings. Scenario 2 reflects an even more robust growth projection assuming 26.6 percent growth in ridership over the next 10 years.

Figure 24: Metrolink Systemwide Average Daily Ridership Growth

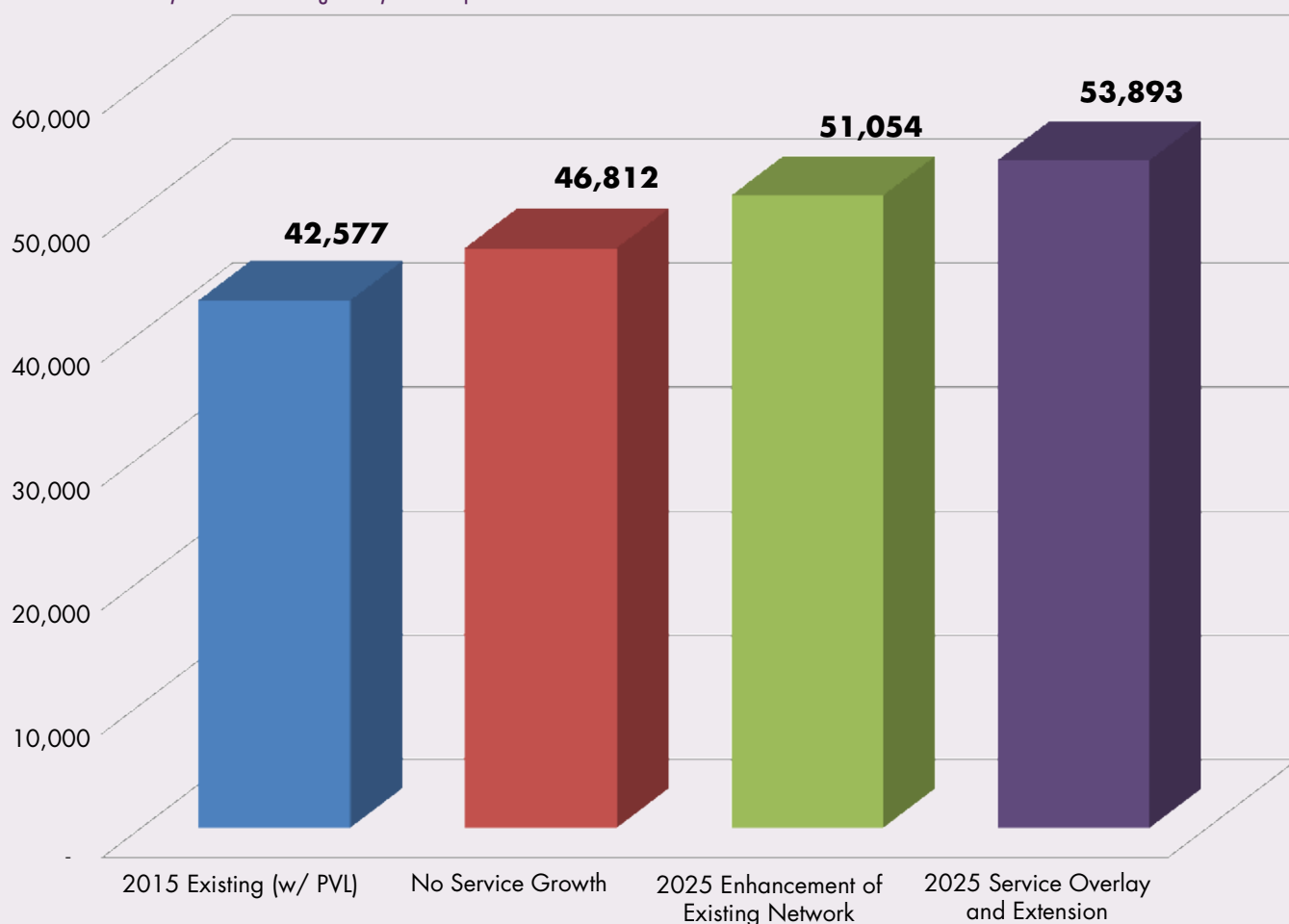


Table 6: Metrolink Average Daily Ridership Growth By Line

Line	2015 Existing*	2025 No Service Growth	Scenario 1: Enhancement of Existing Network	Scenario 2: Overlay of Additional Service Patterns
Ventura County Line	4,375	4,640	4,910	4,993
Antelope Valley Line	5,770	6,390	6,637	6,845
San Bernardino Line	11,064	12,278	12,514	12,348
Riverside Line	4,830	5,455	6,691	6,716
Orange County Line	9,297	8,788	9,349	9,514
91 / Perris Valley Line	2,467	3,797	5,178	6,210
IEOC Line	4,775	5,464	5,775	5,790
Redlands-ONT Airport	-	-	-	691
Redlands to E-Street	-	-	-	294
TOTAL	42,577	46,812	51,054	53,893

* Information taken from SCRRA FY2014-15 average weekday boarding counts by Line. SCAG Regional Travel Demand Forecast Model

Broken down by Line, as shown in **Table 6**, the 91 / Perris Valley Line shows the largest growth projected under each scenario; the growth rate under the No Service Growth Scenario is 54 percent compared to existing ridership and the growth is projected to increase an additional 36-64 percent under Scenarios 1 and 2. The San Bernardino Line is the only line that shows a slight decrease in ridership under Scenario 2 compared to Scenario 1. This decrease is off-set by the overlay of additional service showing ridership in Scenario 2 along the Redlands to E-Street and Redlands to Ontario Airport. Projected boardings for the Orange County Line also show a drop between existing (2015) boardings and the projected No Service Growth scenario in 2025. This is assumed to be attributed to the increase in employment and jobs forecast for Orange County, and the limited reverse peak trains available in the existing schedule to cater to the shift towards a more balanced commute pattern.

Both Scenarios 1 and 2 reflect service patterns that cater to the projected market changes and shifts in travel demand. However, the increase in ridership as a result is minimal, suggesting additional factors may be at play that restricts the ability for Metrolink to attract ridership at a greater rate. As identified in the SWOT analysis (see **Technical Appendix**), one such factor that was not tested

as part of this ridership analysis is fare prices. Another factor that needs to be considered is competing transit services (e.g. parallel express bus services or Metro Rail lines).

Estimated Parking Demand

Driving is the primary mode of transportation that passengers take to access the Metrolink system. Most of this is by single occupant vehicles requiring a place to park once they arrive at their origin station.

Table 7 shows the projected increasing demand for station parking associated with the service level growth outlined in each scenario. If the nominal ridership growth that has been seen over the past five to six years (FY2010 through FY2015) continues, the total available parking in each County will be sufficient to address the projected "No Service Growth" over the next 10 years. However, should the defined Scenarios 1 and 2 generate the projected growth identified in the ridership analysis, a parking deficiency may occur in Orange County. A more detailed breakdown of parking demand estimates by station as compared to existing conditions is provided in the Technical Appendix to this Strategic Plan.

Table 7: Projected Parking Demand by County

County	Existing Spaces Available (2015)	PROJECTED PARKING DEMAND					
		No Service Growth	Growth vs. Existing: (Deficit) / Surplus	Scenario 1: Enhancement of Existing Network	Growth vs. Existing: (Deficit) / Surplus	Scenario 2: Overlay of Additional Service Patterns	Growth vs. Existing: (Deficit) / Surplus
Los Angeles	10,486	8,479	2,007	9,108	1,378	9,434	1,052
Orange	8,304	7,410	894	8,138	166	8,411	(107)
Riverside*	6,055	3,645	2,410	4,376	1,679	5,096	959
San Bernardino	4,826	3,449	1,377	3,591	1,235	4,216	610
Ventura	1,406	773	633	773	633	773	633
TOTAL	31,077	23,756	7,321	25,986	5,091	27,930	3,147

*Includes Perris Valley Line Stations, which come online December 2015

Summary of Estimated Operating & Maintenance Costs

The estimation performed on the projected operating and maintenance costs details both operating revenues (such as fare revenue, maintenance-of-way (MOW) revenue, Member Agency contributions, etc.) and operating expenses (such as train operations, equipment maintenance, fuel, security, transfers to other operators, maintenance-of-way, salaries and fringe benefits, insurance, etc.)

The two components of the cost estimate performed for this Strategic Plan focus on Operations and Maintenance-of-Way. Each of these components has multiple sub-components of both expenses and revenues, which permit allocation to line and to Member Agencies.

- **Operations** – This portion of the cost estimate includes expenses required to operate the Metrolink system including train operations, maintenance of equipment, fuel, security, utilities, transfer payments to other transit operators, revenue collection, payments to freight railroads for dispatching, station maintenance, passenger services, general and administrative expenses, professional services, and insurance.

- **Maintenance-of-Way** – This portion of the cost estimate represents ordinary maintenance of the right-of-ways owned by SCRRRA Member Agencies, and includes routine inspection of track, signals, structures, and repairs as needed.

To reinforce an earlier point, these estimates of cost are presented for illustration only and do not imply any commitment on the part of the Member Agencies for funding. Furthermore, allocated to each Member Agency would still need to be determined.

Table 8 through Table 10 show the growth scenarios by line expenditure, net subsidies, and train miles. When evaluating these figures, the cost per train mile shows a significant reduction under each growth scenario. The No Service Growth Scenario has a cost per train mile of \$112.08. Scenario 1 shows a 26 percent decrease in cost per train mile at \$83.25 and Scenario 3 shows a 31 percent decrease in cost per train mile at \$77.30. Scenario 2 shows the largest decrease in cost per train mile, 34 percent lower than the No Service Growth Scenario at a cost of \$74.16.

Based on the 2025 SCAG forecasts, the growth in ridership is forecast is faster than the growth in operational costs associated with additional service and therefore suggests that the subsidy per train mile can decrease under each growth scenario, by approximately 31-38 percent. Under the No Service Growth Scenario,

the subsidy per train mile is \$64.67. Scenario 1 shows a decrease of 31 percent at \$44.50 per train mile and Scenario 3 shows a decrease of 36 percent at \$41.60 per train mile. Scenario 2 again shows the most significant decrease in subsidy per train mile at 38 percent with \$39.93 per train mile.

Table 8: Total Estimated Operating Expenditure (2015 \$)*

Line	No Service Growth*	Scenario 1: Enhancement of Existing Network	Scenario 2: Overlay of Additional Service Patterns	Scenario 3: High-Speed Rail Service Integration
Ventura County Line (including BBA)	\$31,782,000	\$29,632,000	\$50,317,000	\$33,112,000
Antelope Valley Line	\$64,486,000	\$59,260,000	\$59,543,000	\$62,066,000
San Bernardino Line	\$74,877,000	\$69,303,000	\$80,448,000	\$64,355,000
Riverside Line	\$20,634,000	\$28,097,000	\$25,030,000	\$26,091,000
Orange County Line (including MSEF)	\$55,987,000	\$57,198,000	\$58,765,000	\$73,341,000
91 Line	\$18,776,000	\$44,722,000	\$41,214,000	\$42,961,000
IEOC Line	\$36,549,000	\$46,834,000	\$40,406,000	\$52,439,000
TOTAL	\$303,091,000	\$335,046,000	\$355,723,000	\$354,365,000
Percent Increase vs. No Service	--	10.5%	17.4%	16.9%

* Calculated as train mile share

Table 9: Estimated Member Agency Net Subsidy (2015 \$)*

Agency	No Service Growth*	Scenario 1: Enhancement of Existing Network	Scenario 2: Overlay of Additional Service Patterns	Scenario 3: High-Speed Rail Service Integration
LACMTA	\$94,509,000	\$88,244,000	\$89,646,000	\$91,743,000
OCTA**	\$41,518,000	\$44,543,000	\$42,975,000	\$54,825,000
RCTC	\$12,679,000	\$22,889,000	\$20,990,000	\$22,750,000
SANBAG	\$20,619,000	\$19,594,000	\$27,137,000	\$17,792,000
VCTC***	\$5,561,000	\$3,833,000	\$10,763,000	\$3,585,000
TOTAL	\$174,886,000	\$179,103,000	\$191,511,000	\$190,695,000
Percent Increase vs. No Service	--	2.4%	9.5%	9.0%

* Calculated as train miles by county

No assumptions made as to negotiated costs associated with commuter trains running over UP north of EVC to NGO, Alhambra sub from El Monte to LA, and LA sub above current 12 agreement moves

No assumptions made about costs associated with getting from Rancho Cucamonga to Ontario airport

** San Diego County train miles attributed to OCTA

*** Santa Barbara (EVC to NGO) attributed to VCTC

Table 10: Growth by Train Mile (2015 \$)

Line	No Service Growth*	Scenario 1: Enhancement of Existing Network	Scenario 2: Overlay of Additional Service Patterns	Scenario 3: High-Speed Rail Service Integration
Ventura County Line (including BBA)	283,566	355,956	678,494	428,346
Antelope Valley Line	575,352	711,866	802,899	802,899
San Bernardino Line	668,070	832,510	1,084,782	832,510
Riverside Line	184,099	337,515	337,515	337,512
Orange County Line (including MSEP)	499,524	687,105	792,414	948,751
91 Line	167,524	537,232	555,749	555,749
IEOC Line	326,096	562,606	544,852	678,355
TOTAL	2,704,231	4,024,790	4,796,705	4,584,122
Percent Increase vs. No Service	--	48.8%	77.4%	69.5%

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, tangents and curves
- Bridges and Culverts
- Tunnels
- Revenue Vehicles – locomotives and rail cars
- Non-Revenue Vehicles
- Signals and Train Control
- Other Systems – communication, fare collection, computers, servers, and routers
- Facilities – maintenance facilities and equipment

The TAM Plan will utilize the FTA's Transit Economic Requirements Model (TERM) Lite system to forecast the amount of annual capital expenditures required over a 10-year period, including projected costs to maintain or improve the State of Good Repair (SOGR) backlog or physical condition of SCRRA's transit 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. In addition, SCRRA will run constrained model scenarios, based on funding limitations and specified prioritization criteria and other inputs.

Primary TERM Lite forecasts as of February 2016 for 10-year capital rehabilitation costs are estimated to be approximately \$1.9 Billion (see **Table 11**). These estimates will continue to be refined during the TAM Plan

development effort. Note that the TERM Lite estimate includes assets that may not be owned by Metrolink or its Member Agencies, such as station facilities owned and maintained by station cities.

Table 11: Preliminary Unconstrained 10-Year Capital Rehabilitation Cost Estimate Totals from TERM Lite* (\$ Millions)

	Backlog	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
Track	\$64.2	\$9.8	\$8.2	\$15.9	\$18.2	\$30.3	\$53.5	\$32.8	\$21.0	\$64.8	\$35.0	\$353.7
Bridges/ Culverts	\$73.3	\$3.9	\$5.9	\$17.3	\$4.7	\$2.0	\$2.7	\$4.7	\$5.5	\$7.9	\$2.3	\$130.2
Tunnels	\$11.0	\$1.1	\$1.1	\$1.1	\$1.1	\$1.2	\$1.2	\$1.2	\$1.3	\$1.3	\$1.3	\$22.8
Revenue Vehicles	\$0.0	\$13.3	\$40.9	\$0.0	\$0.0	\$0.0	\$0.0	\$286.5	\$166.6	\$60.6	\$76.0	\$643.9
Non- Revenue Vehicles	\$3.3	\$1.9	\$0.0	\$0.2	\$0.2	\$1.0	\$7.3	\$2.2	\$0.0	\$0.3	\$7.0	\$23.2
Signals & Train Control	\$47.7	\$41.9	\$7.7	\$1.5	\$1.5	\$67.4	\$125.2	\$5.3	\$2.2	\$2.0	\$74.9	\$377.1
Systems, Other	\$48.5	\$0.5	\$3.4	\$1.5	\$2.2	\$2.2	\$0.1	\$1.5	\$2.7	\$3.1	\$28.6	\$94.3
Stations	\$60.7	\$2.7	\$12.6	\$3.8	\$2.0	\$22.8	\$3.3	\$44.3	\$50.8	\$22.1	\$29.2	\$254.2
Facilities	\$3.9	\$3.8	\$4.1	\$3.2	\$7.1	\$4.1	\$5.2	\$11.6	\$3.7	\$3.8	\$9.8	\$60.2
Total	\$312.5	\$78.9	\$83.8	\$44.4	\$37.0	\$131.0	\$198.4	\$390.1	\$253.6	\$165.9	\$264.0	\$1,959.6

* Revised 10-Year Capital Cost Estimates for SCRR TAM Plan, prepared by CH2M HILL for SCRRRA, dated February 24, 2015

Summary of Capital Costs

Capital costs can reflect a wide range of infrastructure investments from track capacity and station construction or enhancements to fleet investments and grade separations. The capital cost estimates by project presented in **Table 12** focuses primarily on projects to enhance the overall capacity of the Metrolink system. A comprehensive list of all identified projects is, however,

provided in the Technical Appendix and sorted by project type and County for reference.

The growth scenarios developed as part of this Strategic Plan and described earlier each require specific infrastructure improvements to execute.

Table 12: 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	Via Princessa to Vincent Grade Double Track	AVL	\$1,086,058,000
Los Angeles	Santa Clarita to Via Princessa Double Track	AVL	\$12,000,000
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 Rancho to CP San Bernardino Junction	SBL	\$31,850,000
San Bernardino	CP Central to CP Archibald Double Track	SBL	\$97,300,000
San Bernardino	CP Beech to CP Locust Double Track	SBL	\$55,000,000
San Bernardino	CP Rochester to CP Nolan Double Track	SBL	\$22,750,000
Los Angeles	CP Amar to CP Irwin Double Track	SBL	\$91,650,000
Los Angeles	CP Barranca to CP White Double Track	SBL	\$70,000,000 - \$110,300,000
Orange	Laguna Niguel to San Juan Passing Siding	OCL	\$22,800,000
San Diego (SANDAG)	CP San Onofre to CP Pulgas Double Track (Stage 2)	OCL / IEOC	\$36,000,000
San Diego (SANDAG)	CP Eastbrook to CP Shell Double Track	OCL / IEOC	\$60,000,000
San Bernardino	CP Rana to CP SB Jct. Double Track Shortway	IEOC	\$22,750,000

County(s)	Project	Line(s)	Cost Estimate
Additional Projects Needed to Support Strategic Plan Growth Scenarios			
San Bernardino	Redlands to New York Street Double Track	Redlands Extension	\$9,480,000
San Bernardino	CP Jordan to CP Freemont Double Track Extension (0.5 miles)	SBL	\$85,000,000 - \$95,000,000
Riverside	CP Eastridge to CP Nuevo Double Track	91L	\$28,887,000
Riverside	CP Highgrove to CP Riverside Fourth Track (BNSF)**	91L	No Additional Cost
Riverside	CP Highgrove to CP Eastridge Double Track	91L	\$65,510,000
Riverside	CP Nuevo to South Perris Double Track	91L	\$51,413,000
Los Angeles	El Monte to Los Angeles (UPRR)	SBL	Not Available

* Assumes a grade separation is required to complete the third main track.

** To be constructed by the BNSF Railway should OTP for Perris Valley Line trains fall below 95% as stated in the Perris Valley Line Agreement between the BNSF Railway and RCTC dated November 2, 2012.

The Future of Metrolink



THE FUTURE OF METROLINK

The Strategic Plan, using customer feedback, Board and Member Agency input, historic cost trends, and market potential, has defined a vision for SCRRA for the next 10 years. It has done so in a manner that does not just look at the growth of the Metrolink system, but at the fundamental functions of SCRRA and what is needed to improve these functions in order to allow the Metrolink service to grow.

The customer feedback as well as Board and Member Agency input make clear that change is needed for SCRRA. Moving forward, SCRRA must manage its assets, its funding, and its customers. It is also clear that the Metrolink market is changing. The market assessment reveals that there is a shift in the commute travel patterns for the region and that additional reverse commute options are needed.

SCRRA faces a number of choices in how it can address the transitions and shift in travel patterns. They include:

- Maintain the current method of operation
- Using existing funding sources focus on investment in the existing system to improve customer satisfaction, value, and system reliability
- Find additional sources of funds to reduce the burden on Member Agencies to support improvements in ongoing operations and the growth of the system

MEASURING OUR PROGRESS

To help provide input for making these choices, a series of strategies and associated metrics are recommended that align with the Board adopted Guiding Principles and the associated Agency Goals presented as part of this Strategic Plan. Once a strategy is implemented, it will be monitored, measured, and reported on regularly (at least annually). 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, this Strategic Plan should be updated every two to three years.

Affecting each of these choices is the potential to change the governance structure of SCRRA. A change in governance will not affect the need to make a choice in how to move forward in addressing the needs of the Metrolink service.

The strategies and associated metrics recommended in **Table 13** are categorized into short-term (5-year) and long-term (10-year) periods.

Table 13: Goals, Strategies, and Metrics

Goals and Strategies	Measureable Outcome (Performance Measurements)	Short-Term (1-5 years)	Long-Term (5-10 years)
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 	■	
Strategy G: Secure Clean Opinions on Annual Audits	<ul style="list-style-type: none"> Clean opinion on annual audits in 2016 and beyond 	■	■

Goals and Strategies	Measureable Outcome (Performance Measurements)	Short-Term (1-5 years)	Long-Term (5-10 years)
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 	■	
Strategy D: Develop and Implement Service Coordination and Connectivity Plans	<ul style="list-style-type: none"> Growth in 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 	■	■

Goals and Strategies	Measureable Outcome (Performance Measurements)	Short-Term (1-5 years)	Long-Term (5-10 years)
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 	■	
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 	■	■

WHAT IS ACHIEVABLE BY 2020?

In the short-term, SCRRA can focus on addressing Agency Goals and growth scenarios by adopting an investment strategy and taking actions with four major thrusts:

1. Strengthening core institutional functions, focused on fiscal sustainability, system reliability, and customer communications and responsiveness.
2. Focus initial investment in the rehabilitation of the system (vehicles and infrastructure) to ensure a state of good repair that can provide a base for supporting of the growth scenarios.
3. 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.

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.

Many of these short-term strategies are further defined in SCRRA's Short-Range Transit Plan, which outlines specific strategies, funding requirements, and investments for the system with a 5-year, short-term focus.

Using this Strategic Plan as a tool, SCRRA can achieve their vision *to be Southern California's preferred transportation system built upon safety, reliability, customer service, leading-edge technology, and seamless connectivity.*

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