FY 2004-2008
REGIONAL SHORT-RANGE TRANSIT PLAN

April 2004

Conan Cheung

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As of May 3, 2004
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CHAPTER 1: INTRODUCTION

With its warm weather and superb quality of life, San Diego County has become one of the most attractive and fastest growing regions in the country. Over one million new people and half a million new jobs are anticipated over the next 30 years. With this growth come the byproducts of a healthy economy. Streets and freeways will become more congested, commute times will increase, and people will be traveling longer distances.

MOBILITY 2030, San Diego’s blueprint for a transportation system, envisions a truly multimodal transportation network that will support our future mobility needs. With a heavy emphasis on developing a world class transit system to support “smart growth” communities with higher density and mixed use development, nearly one half of the region’s transportation investments over the next 30 years will help fund projects that improve the regional transit system.

While it is important to develop new transit services to support the region’s growth, it is equally important to maintain and optimize the existing system to improve the quality of service for our existing riders. In this era of fiscal deficit and increasing operating costs, we are faced with hard decisions on how best to balance the vision of transit in the future, with the fiscal and operational reality of today.

WHAT IS THE SHORT RANGE TRANSIT PLAN?

The Short-Range Transit Plan (SRTP) proposes how the region should balance the short term needs of maintaining and optimizing existing services, while beginning to implement the long term transit vision identified in MOBILITY 2030. As such, the SRTP provides a framework for transit system development over the next five years. Previously, North San Diego County Transit Development Board (NCTD) and the Metropolitan Transit Development Board (MTDB) prepared separate SRTPs for their respective jurisdictions. As a result of Senate Bill 1703 (Peace), the San Diego Association of Governments (SANDAG) has assumed the transit planning, programming, and construction responsibilities for the region including the preparation of a consolidated SRTP. As the first regional SRTP for San Diego County, the FY 2004-2008 Regional SRTP provides an opportunity for consolidated transit planning throughout the region, reflecting the goals and direction for service development as described in MOBILITY 2030.

The SRTP serves six primary purposes:

1. It outlines the goals and objectives for transit service planning and development, based on the SANDAG Board adopted Regional Transit Vision (RTV);

2. It provides an evaluation of current and future travel demand, the existing transit system, and identifies deficiencies and gaps in service;

3. It prioritizes operating expenditures to maintain and improve the regional transit system;

4. It establishes regional guidelines for short range improvements and adjustments in coordination with the Regional Transit Vision.
5. It supports SANDAG’s Capital Improvement Program (CIP), as well as state and federal grant applications; and

6. It coordinates with and guides the Transportation Development Act (TDA) claims approval process and the MTS and NCTD budget development processes.

WHERE DOES THE SRTP FIT IN THE REGIONAL PLANNING PROCESS?

As the metropolitan planning organization (MPO) and regional transportation planning agency (RTPA), SANDAG is responsible for developing long range strategic plans, including the Regional Comprehensive Plan (RCP) and the Regional Transportation Plan (RTP). As the region’s vision for growth, the RCP focuses on addressing and balancing the interconnected issues of achieving more walkable and mixed use communities, greater housing supply and affordable housing, a healthy ecosystem, a prosperous economy, better coordination on borders issues, and greater transportation choices to reduce the dependence on automobiles.

To support this vision, SANDAG’s RTP, MOBILITY 2030, provides a blueprint for the development and management of a multimodal transportation system over the next 30 years. As the transportation component of the RCP, MOBILITY 2030 provides the foundation for better land use coordination, system management, demand management, and multimodal system development. The plan includes a five-year, $25 million Smart Growth incentive program to foster the integration of smart growth land uses and transportation facilities, acknowledging the need for better land use and transportation coordination to more efficiently and effectively serve the region’s communities and businesses. System management through the use of High Occupancy Toll (HOT) lanes, advanced technology, and programs such as the Freeway Service Patrol (roving tow trucks aimed at easing congestion by removing disabled vehicles from freeways during rush hours) will maximize the efficiency of the transportation infrastructure. Ridelink, the region’s transportation demand management program, and the Congestion Management Program will be used to manage travel demand during peak hours.

Finally, MOBILITY 2030 outlines an investment strategy that balances the development of automobile and transit infrastructure for a truly multimodal transportation system. Nearly one half of the transportation investments identified in the plan are focused on improving the region’s transit system, including the development of a network of High Occupant Vehicles (HOV) lanes, managed lanes (lanes for carpools, buses, and paying single occupant automobiles), several high speed and reliable transit services to connect San Diegans to major employment and activity centers, and advanced technology that enhances the travel experience for riders. MOBILITY 2030 is based on a reasonably-expected revenue scenario, which assumes that the region’s half-cent sales tax for transportation projects is extended beyond 2008, and other public funding is increased based on historical trends. The RTP also includes a revenue-constrained and unconstrained scenario.

The Regional SRTP supports the vision of MOBILITY 2030 by providing a short term (five year) plan for transit system adjustments and enhancements. As a revenue constrained plan, the SRTP identifies specific service, operational, and capital improvements that balance the goals of maintaining a productive and cost effective transit system with implementing enhancements envisioned in MOBILITY 2030. These improvements are then forwarded to the annual budget process for prioritization and adoption. The short term nature of the SRTP allows SANDAG the opportunity to annually adjust these investment priorities between maintenance and enhancements based on system monitoring, available funding, and operational constraints.
ABOUT THIS REGIONAL SRTP

The contents of this SRTP are organized into the following six chapters:

Chapter 1 provides an introduction to the SRTP, and describes the role of the SRTP in the regional planning process.

Chapter 2 presents SANDAG’s strategic vision for the future of transit in San Diego, and describes the processes and guidelines governing transit service planning and development in the region.

Chapter 3 describes the existing and potential travel demand for transit in San Diego, including population and employment growth, major activity centers, travel patterns, and changing demographics.

Chapter 4 provides a description of the existing transit services in the region, and identifies challenges and opportunities facing transit provision in the region.

Chapter 5 presents the goals and objectives guiding transit planning and development for the next five years, and evaluates the region’s transit system in meeting them.

Chapter 6 identifies the unmet transit needs in the region and the FY 2005 service adjustments identified to address these gaps and deficiencies, and establishes guidelines for short range service development.

In addition to this document, a complementary Technical Appendix presents the following:

- History of SANDAG, MTDB, and NCTD;
- Inventory of the existing transit system, including services, rolling stock, and capital facilities;
- Service Implementation Plan for each transit agency;
- Transportation Development Act (TDA) Performance Improvement Recommendations;
- FY 2003 operating statistics by route;
- Historical operating statistics by transit operator;
- FY 2005 draft capital and operating budgets;
- Short range transit planning policies and agreements;
- Title VI environmental justice analysis.

PUBLIC INFORMATION AND OUTREACH

Information on the SRTP, MOBILITY 2030, RCP, and other SANDAG programs are available via www.sandag.org.
CHAPTER 2: GUIDING PRINCIPLES

REGIONAL TRANSIT VISION

Although more than 320,000 daily trips are made on the region’s bus, trolley and rail services, transit trips only account for five percent of work trips, and less than one percent of all trips made in the region every day. With a relatively short duration of peak period congestion, ample parking, limited or no transit service to developing parts of the region, and an automobile oriented land use pattern, there is little doubt as to why the majority of trips are made by single occupant vehicles. In fact, the most recent survey of transit riders indicates that the majority of regular riders use transit because they have no other travel alternative.

With the significant population growth projected over the next 30 years, public transportation will need to play an increased role in serving San Diego’s mobility needs. As the region grows, so will the demand on its land use and transportation infrastructure. In some instances, people will be living further and further away from their jobs. As the length and duration of their commute increases, so will the geographic extent and duration of congestion. In other cases, urban villages will be developed that will promote walking, biking, and transit for commute as well as non-commute trips. To effectively address the increased congestion and travel demand from this growth, the region must focus appropriate levels of investment towards enhancing and expanding the transit system consistent with travel demand.

The SANDAG Board adopted the Regional Transit Vision (RTV) in late 2001 to help guide the future development of transit in the San Diego region. The RTV was developed as a collaborative effort between SANDAG, MTDB, NCTD, Caltrans, local jurisdictions, and a 50 member Citizens Advisory Committee for Transportation. In addition, extensive market research was conducted throughout the region to learn more about the attitudes and preferences that influence San Diegans’ daily travel choices. This research identified three primary service qualities important to residents: (1) speed and flexibility, (2) travel experience, and (3) personal safety.

Service Concept

Based on input from partner agencies and the public, SANDAG developed the RTV as a network of fast, flexible, reliable, safe, and convenient transit services that link residential areas with major employment and activity centers. This network is comprised of four service concepts: neighborhood, local, corridor, and regional. A description of each concept follows (see Figure 2.1).

Neighborhood Services
This service type is designed to facilitate community-level trip making, and would provide neighborhood circulation, feeder access to medium and long distance services, and/or specialized service (e.g., for senior citizens unable to drive). Neighborhood services would likely use shuttle vehicles that are smaller than traditional buses, and have an average stop spacing of 1/4 mile.
Local Services
This service type aims at serving local trip needs, resulting in lower travel speeds (10 to 15 mph) and more frequent stops (1/4 to 3/8 mile average spacing). These services are designed as the basic mobility network for the region. Most of the existing bus system operates as this type of service.

Corridor Services
This service type is aimed at facilitating medium-distance trip making. This service maintains relatively high average speeds (20 to 25 mph) and operates with limited stops (3/4 to 1 mile average spacing) primarily on major arterials. Corridor services will serve as the spine of the regional transit system.

Regional Services
Given that many trips in the region are longer distance, this service type maintains high average speeds (35 to 40 miles per hour [mph]) and operates with very limited stops (more than three miles between stops, on average) on freeways and major arterials. Regional services will operate as the primary transit in corridors where longer station spacing is justified based on longer distance travel patterns (e.g., I-15 corridor), or as an overlay for corridor services, where a faster, more limited-stop service is justified to handle high volume, long-distance trip needs. These routes would focus on serving key employment sites and major trip attractions.

Together, these four service concepts provide a system of public transportation that meets the distinct travel needs of various travel markets.

Figure 2.1 – Regional Transit Vision Service Concepts
Factors Influencing the Future of Transit

The success of the RTV in relieving congestion and preserving our quality of life hinges on the region’s ability to achieve the following four complementary efforts.

Capital and Operations Funding
Both capital and sustainable operating funds will be required to realize the rich network of transit services envisioned under the RTV. Transit infrastructure, including vehicles, right-of-way, guideways, maintenance yards, and storage facilities, require capital investment. The level of capital funding secured will be a prime determinant of how much transit can grow. The second part of the funding picture involves funding for transit service operations. Virtually all transit services in the U.S. require funding subsidies to provide day-to-day services. Significant increases in on-going local funding for operations will be required to support any major increase in the level and quality of transit service provided in the region.

Land Use Coordination
The success of any transit service is dependent on regional and local land use patterns. Low-density development, big box retail, and auto-oriented urban design (e.g. narrow sidewalks, wide intersections, and lack of pedestrian facilities) decrease the attractiveness and effectiveness of transit. In order for the RTV to be successful, SANDAG and the region’s local jurisdictions must be committed to focusing higher intensity development along major travel corridors, in established urban areas, and near major transit centers. In addition, the region will need to focus on improving the pedestrian orientation of our communities in order to facilitate access to and from transit facilities.

Transit Priority Measures
As traffic congestion increases throughout the region, transit priority measures (e.g. high-occupancy vehicle [HOV] or managed lanes on freeways, transit only lanes, and signal priority measures on arterial streets) will become increasingly important for providing fast, reliable, and cost effective transit service. Priority measures will allow transit services to travel faster than automobiles through congested corridors, while the faster and more reliable travel times will allow transit operators to provide dependable and efficient services.

Advanced Technology
Advances in technology should be employed to enhance the passenger’s travel experience, and to promote the efficient operation of service. Advanced design vehicles and “smart fare card” technology will allow for easier and speedier boarding and alighting. Real time information and upgraded stations and amenities will promote a more relaxed and safe waiting environment for passengers.

Together, these transit supportive efforts will result in increased ridership through better quality of service, as well as improved operational efficiency.

SERVICE DEVELOPMENT GUIDELINES

SANDAG is currently developing regionwide service planning and adjustment policies to ensure that transit service is consistent and coordinated among the various transit services in the region. These policies will define regional guidelines for developing service and operational adjustments, evaluating new service proposals, setting fares, and bus stop location planning. These policies promote “best practices” in service development that SANDAG and individual operators will follow.
to achieve the ultimate goal of providing a convenient, easily understood, efficient, fast, flexible, and seamless family of services that meet the travel needs and desires of the region’s public.

Compliance with these policies will be monitored for both new and existing services. SANDAG will ensure that all proposed service and operational changes comply with the policies. Any non-compliance will be resolved prior to the implementation of the change. In addition, an annual compliance review of existing services will be conducted.

SHORT RANGE PLANNING PROCESS

SANDAG’s short range planning process provides a framework for systematically adjusting services to meet changes in travel demand and operating constraints, while promoting service enhancements to attract new market segments. This process is based on grass roots and collaborative planning principles that promote customer and stakeholder involvement from inception through implementation. In addition, quantitative methods are employed to ensure consistency and objectivity in service development and evaluation. SANDAG’s short range planning process consists of four primary functions: Monitoring, Planning, Budgeting, and Implementation as described in detail below.

Monitoring

SANDAG and the region’s transit agencies and operators continuously monitor the transit system to ensure that services meet the travel needs of the public, quality of service is maintained and improved, and service is provided cost effectively. Individual operators focus on the day to day operations of their specific routes, and monitor the impacts of the current operating environment on the performance of their services. Impacts may include delays due to traffic congestion, detours resulting from construction, as well as heavy passenger loads due to school bell times, summer tourist travel, and military presence. In addition, operators evaluate the cost impact and cost effectiveness of their operation through monthly and quarterly budget monitoring reports which compares budgeted expenses to actual costs. Data sources for operator monitoring include customer, driver, and supervisor comments, trips and route level passenger counts, and a series of reports detailing operating statistics such as revenue miles and hours, schedule reliability, roadcalls and missed trips, overtime hours employed, fuel and maintenance costs, and fare revenue.

While operators focus on their specific operations, SANDAG monitors transit service and operations on a systemwide level. Three performance monitoring programs have been established to systematically evaluate services: the Annual Route Monitoring Report, the Quarterly Operations Report, and the Performance Improvement Program (PIP). The Annual Route Monitoring Report provides SANDAG and the transit agencies and operators with an in-depth understanding of the performance of each route, and includes recommendations for improving under performing routes and enhancing higher performing routes. The quarterly operations report provides an evaluation of the changes in operator level performance and efficiency, including reasons for upward or downward trends. Through the PIP, we evaluate each transit operator’s efforts towards meeting performance targets and implementing annual operational improvements agreed upon by SANDAG and the operator to improve the efficiency and effectiveness of the transit system in line with the objectives of the RTV. A detailed description of each performance monitoring program is presented in Chapter 5.

In addition to these formal monitoring programs, SANDAG receives and responds to comments from the public on transit services and service changes. Each comment is investigated, and if
appropriate and feasible, service changes are made to address the comment or kept for future consideration.

Planning

Service changes and new services are planned and developed to address changes in travel demand, operating environment, and to attract new riders. Planning studies and analyses are initiated as a result of the following: system monitoring, public comments, regional goals and funding priorities, fiscal constraints, and forecasted growth throughout the region. Planning studies range from minor route analysis to subregional service restructuring and major corridor studies. Regardless of the magnitude of analysis, all studies include a definition of goals, identification of the issue or deficiency to be addressed, and a prioritized list of recommended service improvements and adjustments. Stakeholder advisory committees and community groups provide input throughout the planning process to ensure that all issues are addressed, and to assist in the development of recommendations. In addition, final study recommendations are presented at a public hearing prior to SANDAG Board adoption.

Service changes and new services can be developed as either cost neutral proposals or proposals that impact operating budgets. Cost neutral proposals are developed through the reallocation of transit resources (i.e. revenue miles, revenue hours, vehicles and drivers) from unproductive services to a more productive or beneficial service (e.g. enhancements to a productive service or new services). Since the implementation of cost neutral proposals is not contingent on budget action, they can be implemented without going through the budget development process described below.

Every year, service proposals resulting in a budget impact are consolidated into a regional Service Implementation Plan and forwarded through the annual budget development process for evaluation and prioritization. These proposals must be approved through the budget process prior to implementation, as described below.

Budgeting

Once the regional Service Implementation Plan is developed by SANDAG in conjunction with the region's transit operators, it is considered for implementation during the annual budget development process. This process begins in January each year, and concludes six months later when the SANDAG Board adopts the budget for the upcoming fiscal year. During this budget process, service enhancements identified in the regional service improvement plan are considered for implementation based on SANDAG priorities and funding availability. The final package of service enhancements is presented to the public for comment prior to SANDAG Board adoption as part of the budget public hearing.

In recent years, operating costs have exceeded projected revenues, resulting in an operating budget deficit. To balance the budget, the SANDAG Board must make difficult decisions affecting service and operations, including the use of non-recurring revenues (e.g. one time capital funds and reserves), fare increases, and service reductions. Often, a plan is developed that incorporates many or all of these strategies. During these times of fiscal constraint, service improvements are replaced with service reductions, which are developed with the goals of minimizing impact to existing riders, maintaining service throughout the region, and maintaining network connectivity. A public hearing is held prior to the adoption of any major service reduction plan to provide a forum for the public to comment on the proposed service changes.
Implementation

Service changes, whether improvements or reductions, are implemented during one of three regularly scheduled service changes, held in the Fall, Winter and Spring. Transit operators are responsible for implementation, which may include installing or removing stops, ensuring vehicles are available, scheduling, driver bidding, developing maps and timetables, and marketing. Transit operators are also responsible for notifying the public of service changes, usually in the form of written notification provided aboard vehicles or within ride guides.

New services are implemented for a trial two-year period, at which time the route is evaluated to ensure that it is meeting its performance expectations. At the end of the evaluation period, the SANDAG Transportation Committee must take action to retain the route as a regular service. Otherwise, the route may be discontinued with no further action.

RELATIONSHIP WITH PARTNER AGENCIES

Interagency coordination is essential for SANDAG to successfully fulfill its roles and responsibilities for planning, adjusting, and improving transit services and facilities. Coordination with partner agencies ensures that SANDAG’s programs, services, and facilities complement and are consistent with other local, regional, and state efforts. This collaboration also helps SANDAG to better understand and address concerns expressed by partner agencies and key stakeholders, resulting in greater cooperation and support for SANDAG efforts. Most interagency relationships are maintained at the local and state levels, as described below. In addition, SANDAG coordinates with federal agencies for conformance and funding.

Local Level Coordination

Transit Operators
SANDAG coordinates the various efforts of the region’s transit operators to ensure that seamless and unified service is provided to the public. This coordination is achieved through cooperative agreements, advisory committees comprised of SANDAG and operator staff, and joint ventures. In addition, operators are involved in various aspects of SANDAG planning, engineering, and finance activities.

Local Jurisdictions
To ensure consistency with local jurisdiction plans and programs, SANDAG coordinates its transit service planning activities with the 18 cities and the County of San Diego. In addition, the City of San Diego provides two staff members to serve as planning and engineering liaisons between SANDAG and the City of San Diego. SANDAG policies and programs promote pedestrian and transit-oriented development through long-range plans, memorandums of understanding (MOUs), development project review, zoning and street design manual updates, right-of-way protection and acquisition, fund programming, education, and outreach.

State Level Coordination

Caltrans
Caltrans is responsible for transportation planning, engineering, and construction on state facilities. To enhance coordination, Caltrans provides SANDAG with an engineering liaison located at SANDAG. Caltrans also maintains oversight responsibilities for various state and federal funding programs. SANDAG enjoys a cooperative partnership with Caltrans District 11, particularly on large
construction projects, including the I-15 Managed Lanes/BRT Project and the Mission Valley East LRT extension.

Coordinating Committees

Interagency coordination is established and maintained through ad hoc and standing committees at both the staff and Board levels. Table 2.1 provides a list of committees through which SANDAG coordinates its activities.
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<tr>
<td>Accessible Services Advisory Committee (ASAC)</td>
<td>monitors accessibility in operations and service procedures and makes recommendations on implementation of Complementary Paratransit Plan; comprised of operators, social service agencies, and consumers; meets monthly.</td>
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<td>Bicycle-Pedestrian Advisory Working Group</td>
<td>administered by SANDAG, this group advises on facility improvements related to bike and pedestrian uses.</td>
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<tr>
<td>Board of Directors (BOD)</td>
<td>The Board of Directors is the governing body responsible for establishing all of the agency’s policies and programs. The Directors are elected officials, either a mayor, council member or supervisor, from each of the region’s 18 incorporated cities and the county government. Voting is based upon membership and the population of each jurisdiction, providing for a more accountable and equitable representation of the region’s residents. Representatives from Imperial County, Caltrans, the U.S. Department of Defense, the San Diego Unified Port District, the San Diego County Water Authority, MTS, NCTD, and a representative from the Republic of Mexico serve on the Board as non-voting, advisory members.</td>
</tr>
<tr>
<td>Transportation Committee (TC)</td>
<td>The nine-member Transportation Committee advises the SANDAG Board of Directors on major policy-level matters related to transportation. Committee members provide oversight for the consolidated transportation responsibilities. Members provide oversight for transportation plans, establish criteria for prioritizing transportation projects, and approve Transportation Development Act claims and amendments to regional and state transportation improvement programs, and approve transit operator budgets. The committee consists of Board members or alternates representing North County Coastal, North County Inland, East County, South County, the mayor or council member from the City of San Diego, a supervisor from the County of San Diego, one member each from the Boards of MTS and NCTD, and a member of the San Diego County Regional Airport Authority.</td>
</tr>
<tr>
<td>Joint Committee on Regional Transit (JCRT)</td>
<td>consists of three board members each from MTS, NCTD, and SANDAG who meet periodically to discuss ways of better integrating our two transit systems, and act as the advisory committee on regional consolidation.</td>
</tr>
<tr>
<td>Joint Finance Workshop Committee (JFWC)</td>
<td>educates the Board members on the components of the budget, culminating in the adoption of the multiyear financial operating plan at the April meeting. Workshops are attended by members of the three Boards. There are usually four workshops a year, one each in January, February, March, and April.</td>
</tr>
<tr>
<td>Planning, Operations, and Marketing Coordinating Committee (POMCC)</td>
<td>coordinates planning, operations, and marketing activities for NCTD, and MTS services; composed of planning, operations, and marketing staffs of SANDAG, NTCD, and MTS; meets approximately once a quarter.</td>
</tr>
<tr>
<td>Planning Study Technical Committees</td>
<td>committees comprised of operators, jurisdictions, and other stakeholders developed for specific planning studies to review deliverables and provide input and directions for work.</td>
</tr>
<tr>
<td>Policy 43 Working Group</td>
<td>reviews all new and enhanced service submittals proposed by transit operators for implementation.</td>
</tr>
</tbody>
</table>
Regional Transit Management Committee (RTMC) - reviews all major transit developments and recommends coordination and development policies for the San Diego region; deals with broad issues related to financing, legislation, planning, and Americans with Disabilities Act (ADA) service issues; composed of General Managers of all fixed-route operators and SANDAG staff; meets every two to four weeks.

Subcommittee on Accessible Transportation (SCAT) - administered by SANDAG; makes recommendations on regional accessible transit operational issues; meets quarterly; membership consists of representatives from the region’s transit operators, elderly and disabled persons, and the public and nonprofit agencies serving them.

Transit Services and Facilities Advisory Committee (TSFAC) - a committee comprised of operators and jurisdictions that review services and capital proposals that will be included in the operator’s annual budgets.

RELATIONSHIP WITH THE PUBLIC

To better serve the travel demands of the San Diego region, SANDAG encourages public participation at all levels of the transit planning, development, and implementation. SANDAG’s Public Involvement Program informs and involves citizens in various agency programs, projects, and work activities. Since this program also assists in identifying and resolving environmental justice and social equity issues, special outreach is provided to lower income households, minorities, persons with disabilities, representatives from community and service organizations, tribal councils, and other public agencies. Citizen participation objectives include involvement of interested citizens, stakeholders, and representatives of community organizations in agency work through timely workshops on topical issues, fully noticed public hearings, and ongoing broad citizen/organization involvement in the planning and decision processes.

Board members and staff regularly make presentations to various leadership, civic, and community groups about transportation issues and solutions. Board members and staff proactively provide information to the general public through websites (www.sandag.org, www.sdcommute.com), public notices and display advertisements in general circulation and minority/community newspapers, newsletters, report synopses, Take Ones, Rideguides, and news releases. In addition, SANDAG sponsors public outreach events to promote transportation programs and gauge public opinion on transportation and other regional needs. Special workshops and other forums are offered as needed to focus attention on individual projects and encourage the public's involvement. The Public Involvement Program meets federal transportation planning process regulations.
CHAPTER 3: THE NEED FOR TRANSIT

We don’t need to wait for the future to feel the effects of regional growth. As streets and roads become more congested during longer periods of the day, and affordable housing continues to be pushed further away from our city centers, people must spend more time traveling, thus eroding their quality of life and the quality of the region. As we prepare for the future, we must strive to reverse this negative impact of growth by improving the region’s mobility.

During the last 20 years, the growth in travel demand has consistently outpaced the growth in population and employment, and this trend is expected to continue through 2030. Like most metropolitan areas experiencing rapid growth, the San Diego region has not been able to keep up with the demand for travel. Many of the region’s major transportation facilities are operating at or beyond their capacity, and we cannot expect that building new roads and freeways will solve our transportation problems. Instead, we must maximize the efficiency of the region’s transportation system by focusing on moving people (person throughput) rather than vehicles (vehicle throughput). The best way to increase person throughput is with a robust transit system.

As with any service, designing a successful transit system begins with a comprehensive understanding of people’s travel demand. Where are they coming from? Where do they want to go? When do they want to travel? What travel factors are important to them – speed, safety, comfort, cost, reliability, etc.? Answering these questions will allow us to make the most of our transit resources by providing the appropriate services to the areas and during the times that match the public’s transportation demands.

UNDERSTANDING OUR CURRENT AND POTENTIAL CUSTOMERS

Since market research forms the backbone of any private sector development and investment strategy, SANDAG conducts periodic surveys to support the planning and development of transit services in the region. A telephone survey of residents and an on-board survey of transit riders are both conducted every three to five years, with the most recent ones completed within the last few years. These surveys help us better understand who our current riders are, why people use or don’t use transit, and what changes we should make to improve service for our existing riders and to attract new riders.

Based on the most recent resident survey completed in 2003, 85 percent of respondents have ridden transit in the region, and 51 percent used transit sometime within the past 12 months. However, only 9 percent indicated that they use transit regularly – at least once per week. These statistics indicate that the majority of people who used transit within the past year are occasional riders, who use transit to get to Qualcomm Stadium, special events in downtown San Diego, or due to special circumstances.

While many types of people use the region’s transit services and for different purposes, the typical transit rider fits a much narrower profile. When we look closer at the survey results of our regular transit riders, we notice two defining characteristics – in general, they are from low income...
households and do not have regular access to a car. According to the 2001 on-board survey, over half of all respondents were from households that earn less than $20,000 per year, with close to 70 percent earning under $30,000 per year. Meanwhile, San Diego’s median household income is around $47,268. The survey also indicated that almost three quarters of all respondents did not have access to a car for the trip they were making, and 65 percent of them came from households with one or less automobile.

Based on our most recent resident and on-board survey, we can see that our current ridership is mostly transit dependent, with the exception of the Coaster commuter rail passengers. This research indicates that, in general, people use our service because they have no other alternative. This point is emphasized by the fact that our household survey found that nearly 60 percent of our past riders stopped using transit as soon as they bought or repaired a car. In fact, 39 percent of them stopped using transit because it took too long, while 33 percent said that the service was inconvenient. Others did not like their travel experience on board transit.

If a car is available, most San Diegans choose to drive instead of taking transit. There are three reasons for this mode choice:

1) Speed and Reliability – compared to the automobile, transit service is slow and unreliable, particularly for longer distance trips,

2) Accessibility - transit is not accessible, whether geographic (does not operate in areas needed) or temporal (does not operate during the times of day or days of week needed), AND

3) Travel Experience - transit does not fulfill people’s travel preferences, such as safety, comfort, and cleanliness

Our market research shows that improving the speed and schedule reliability of service, as well as avoiding traffic congestion, are the most important transit improvements for both existing and potential riders. For existing riders, improving the access of our services, both geographic and temporal (days and hours of service) is also an important factor, since they are largely transit dependent. For our potential market of “choice” riders (people with various travel options), we must also focus on providing a travel experience that is competitive with the automobile. Addressing all of these criteria will allow us to improve service for our existing riders as well as attract new riders.

WHERE ARE THEY COMING FROM AND GOING TO?

The first step in improving the accessibility of our services is to understand the travel patterns of the region, and how they are changing.

Population

Since most trips begin or end at home, it is important to understand where people live in the region. In 2000, the San Diego region housed over 2.8 million people (see Table 3.1). Nearly one half of the population resided in the Central and North City areas of the region, including downtown San Diego, Mid-City, National City, Pacific Beach and the Golden Triangle. Other areas of high population concentrations include the South Suburban communities of Imperial Beach and

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1 One exception is the average Coaster commuter train rider who generally comes from a higher income household and has regular access to a car.
Chula Vista, the East Suburban cities of El Cajon and Santee, and the North County areas of Oceanside, Vista and Escondido. Figure 3.1 shows the distribution of population throughout the region.

Within the next ten years, we can expect to see much of the residential development occur outside of the traditional urban centers (see Figure 3.2). Although downtown and southeast San Diego will continue to experience high growth rates, most of the population increase is expected in the newer communities of East Chula Vista, Spring Valley, Rancho San Diego, and the North County Coastal inland areas east of Del Mar, Encinitas, Carlsbad, and Oceanside.

Highlight: Although most of the population still resides in the established urban areas of the region, we can expect to see a shift towards the newer suburban communities, particularly in South Bay and North County. Due to the lower densities and discontinuous street patterns, these areas are typically harder to serve with transit.

Employment and Major Activity Centers

Now that we understand where people are coming from, we need to know where they are going. Since the purpose of most trips is to get to work, it is important to understand where major employment centers are located throughout the region, as well as where we expect them to be in the future. Over the past decade, San Diego has experienced a shift in the regional economy from predominantly local services to an export-driven economy, including industries such as biomedical production, computer, and electronic manufacturing. This change in economic focus has resulted in the development of new business centers and industrial parks located primarily in suburban areas of the region.

In 2000, 1.4 million jobs were located throughout the region (see Table 3.1). Most of the employment was located in downtown San Diego, Midway/Sports Arena area, Mission Valley, Kearny Mesa, Golden Triangle, Mira Mesa, Rancho Bernardo, Carlsbad, and San Marcos. Figure 3.3 presents the distribution of employment throughout the region. As evident in Figure 3.4 employment growth by 2010 will continue to be located primarily in the suburban areas of the region. Although downtown San Diego will continue to experience high employment growth, most of the new jobs will be located in the established business centers listed above, as well as newer facilities in Poway and Otay Mesa.

Although work trips are a large portion of the daily trips in the region, people travel for many other reasons, including school, shopping, medical appointments, recreation, entertainment, and visiting friends and family. Many of these trips are made locally within a person’s community. As shown on Figure 3.5, hospitals, schools, and shopping centers are evenly distributed throughout the region to provide local access to residents. However, major attractors, such as universities, tourist attractions, and regional shopping centers, draw visitors from throughout the region. These major attractors are concentrated in the established urban areas of the region, including downtown San Diego, Mission Valley, North Bay, Mission Bay, and the Golden Triangle.

Highlight: Although downtown San Diego continues to be a center of business, most employment is, and will continue to be in suburban business parks located in Golden Triangle, north along the Interstate 15 corridor, and in Otay Mesa. While it is assumed that people travel regionally to get to work and major regional attractors, most of their other trips are made locally.
<table>
<thead>
<tr>
<th></th>
<th>Central</th>
<th>North City</th>
<th>South Suburban</th>
<th>East Suburban</th>
<th>North County West</th>
<th>North County East</th>
<th>East County</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2010 Population</strong></td>
<td>688,225</td>
<td>758,599</td>
<td>393,371</td>
<td>510,366</td>
<td>426,724</td>
<td>433,664</td>
<td>24,726</td>
<td>3,235,675</td>
</tr>
<tr>
<td><strong>Population Change 2000-2010</strong></td>
<td>11%</td>
<td>15%</td>
<td>28%</td>
<td>10%</td>
<td>17%</td>
<td>14%</td>
<td>17%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>2000 Employment</strong></td>
<td>311,600</td>
<td>527,366</td>
<td>85,859</td>
<td>145,328</td>
<td>168,764</td>
<td>138,919</td>
<td>6,837</td>
<td>1,384,673</td>
</tr>
<tr>
<td><strong>2010 Employment</strong></td>
<td>360,374</td>
<td>603,158</td>
<td>103,720</td>
<td>163,791</td>
<td>187,839</td>
<td>163,111</td>
<td>8,213</td>
<td>1,590,206</td>
</tr>
<tr>
<td><strong>Employment Change 2000-2010</strong></td>
<td>16%</td>
<td>14%</td>
<td>21%</td>
<td>13%</td>
<td>11%</td>
<td>17%</td>
<td>20%</td>
<td>15%</td>
</tr>
</tbody>
</table>
Figure 3.1
2000 Population

Population
- Less than 500
- 500 to 1,000
- 1,000 to 2,500
- 2,500 to 5,000
- Greater than 5,000

Transit Route

Note: Grids are 1/2 mile by 1/2 mile
Figure 3.2
Population Growth
2000 - 2010

Population Growth
- Less than 100
- 100 to 250
- 250 to 500
- 500 to 1,000
- Greater than 1,000

Transit Route

Note: Grids are 1/2 mile by 1/2 mile
Figure 3.4
Employment Growth 2000 - 2010

Employment Growth
- Less than 100
- 100 to 250
- 250 to 500
- 500 to 1,000
- Greater than 1,000

Transit Route

Note: Grids are 1/2 mile by 1/2 mile
WHEN DO THEY WANT TO TRAVEL?

Knowing where people want to go leads to only part of the solution for improving transit accessibility. We also need to understand when people need to travel.

For many businesses, a typical work schedule is 9:00 am to 5:00 pm from Monday through Friday. Morning and afternoon peak hour congestion indicates that this is still the predominant work schedule in the region. However, recent surveys and studies\(^2\) indicate that weekday work schedules vary a few hours from the typical schedule. Many employees are not on a strict schedule, and have the flexibility to arrive at work early or late. In addition, some businesses allow their employees to maintain flexible schedules such as 9/80 work weeks where employees work 9 hours per day, and receive one day off every two weeks.

Work schedules also vary by industry. For example, retail stores, restaurants, movie theaters, and other services are open well into the night and/or on weekends. Other businesses, including manufacturing, hotels, and hospitals are open 24 hours per day, 7 days per week. Many employees of these businesses work late night and/or weekend shifts. Since a higher percentage of these service workers are transit dependents, the need for commuter services during these off-peak periods is critical for them to maintain employment.

Since most people are at work during the weekdays, many of their other trips are made at night and on weekends. Most of these trips, such as going to the store, medical appointments, or visiting friends and family, are made on a regular basis. Travel to major regional attractors, however, generally follows a seasonal pattern. For example, traffic to major universities is greater during weekdays in the Fall, Winter, and Spring, when school is in session. In contrast, attractions such as the beaches, the Zoo, Sea World, and Seaport Village are frequented much more during summer weekends than during any other days of the year.

**Highlight:** Commuter services should still focus on the traditional work week. However, these services may also be warranted at specific times during the night and on weekends when popular work shifts begin and end. Transit service to major regional attractors may need to be provided or enhanced during specific times of the year when the demand is greatest. Finally, local services should provide convenient access to community destinations throughout the day and on every day of the week.

\(^2\) Route 844A on-board survey and employer surveys conducted for Poway Business Park and Rancho Bernardo.
WHAT ARE THEIR TRAVEL PREFERENCES?

In 2001, the region’s transit agencies conducted a resident survey\(^3\) to better understand the factors that choice riders prefer in their travel experience, such as speed, reliability, flexibility, and travel experience. Eight key factors were identified as being important considerations for choosing a mode of travel – the need for flexibility and speed, sensitivity to personal travel experience, sensitivity to personal safety, concern for the natural environment, sensitivity to use of time, sensitivity to transportation costs, sensitivity to crowds, and sensitivity to stress. However, only two of these factors, sensitivity to personal travel experience and the need for flexibility and speed proved to be common in the majority of responses.

As a follow up to this research, the 2003 resident survey asked several questions about the perception of flexibility, speed, and travel experience for transit compared to the private automobile. Figure 3.6 shows the average responses to these questions.

Figure 3.6 – Agreement with Travel Statements by Various Modes - Overall

In general, travel experience, including safety, comfort, and cleanliness, rated higher in importance compared to flexibility and cost. The Coaster proved to be the most similar to the private automobile for travel experience, while the bus and trolley service were perceived to be less clean, comfortable, and safe. The perception of speed of transit compared to a private automobile varied by transit mode. Modes with dedicated right of way outside of mixed flow traffic, such as the Coaster commuter rail and San Diego Trolley light rail services, were competitive to driving, and

\(^3\) “Market Research Approach for TransitWorks Long-Range strategy, prepared by Cambridge Systematics for MTDB in 2002.”
even surpassed the private automobile in avoiding traffic. Existing bus service, however, was not perceived as being a fast transportation alternative. In terms of flexibility, none of the transit modes were competitive with driving.

**Highlight:** To compete with the automobile, we must make our services faster, more flexible, and more enjoyable.
CHAPTER 4: THE EXISTING TRANSIT SYSTEM

This chapter provides a broad overview of the region’s transit system, as well as the challenges and opportunities we face in providing efficient and effective service throughout the region. A more detailed description of the transit system can be found in the technical appendix.

OPERATING ENVIRONMENT

SANDAG oversees transit service throughout the County of San Diego. Its jurisdiction consists of 4,261 square miles. However, most of the development is centered on the western half of the county. The physical environment within the region consists of hills, canyons, lagoons, and bays, which limit the travel corridors connecting our region, and result in circuitous and non-contiguous street patterns. Combined, these factors present a challenge to providing access and a high level of service to all areas of the region.

San Diego County is bordered by Orange and Riverside Counties to the north, and Mexico to the south. With more affordable housing opportunities in Western Riverside, San Diego County is experiencing drastic increase in travel demand from Riverside County into the region. Likewise, with the busiest international border in the country, many of the trips made within the region originate from Mexico.

Although the Regional Comprehensive Plan (RCP) envisions intensification of development in our urban centers, the existing built environment consists of medium density urban centers and lower density suburban development, with the exception of downtown San Diego. In addition, ample parking and low gas prices provide added incentive for people to drive.

Types of Service

Providing service to San Diego’s diverse topography, development pattern, and population is a challenge. Therefore, we must provide family of service that is tailored to fit the different travel markets and operating environments we serve. The trolley, Coaster and express bus routes provide fast interregional service along major travel corridors, while local bus service provides convenient access to homes, businesses and other local or near by destinations. Demand responsive services operate in lower density areas that lack distinct travel patterns, while ADA paratransit service provides basic mobility for senior and disabled citizens.

Since various services are designed to meet different needs, they must be developed and evaluated according to their primary function. For example, commuter express services are designed to provide fast service from a few points of origin to a common destination. In contrast, local bus service should provide access to origins and destinations along the entire length of the route. Therefore, we should expect to see a greater number of passengers served on local bus service, due to higher passenger turnover along the route, while express services should achieve faster operating speeds. Understanding these differences is crucial towards developing the appropriate type of service for each travel need. SANDAG and region’s transit agencies are currently developing service categories to help identify the differences between services, and to allow for a more equitable comparison of service performance.
Although transit service in the region is provided by six different transit operators – Chula Vista Transit (CVT), Metropolitan Transit System Contract Services (MTSCS), National City Transit (NCT), North County Transit District (NCTD), San Diego Transit corporation (SDTC), and San Diego Trolley Incorporated (SDTI) – we strive to provide a seamless system of services to the public. Since 1981, a uniform fare structure has been maintained for all Metropolitan Transit System (MTS) services (all services excluding NCTD). This agreement helps coordinate the region's transit system, and simplifies the customer’s travel experience by guaranteeing that all transit operators follow the same fare and pass structure. MTS operators also adhere to a master transfer agreement, ensuring that free passage is given to riders transferring to a route with an equal or lower fare. With the regional agency consolidation comes the opportunity to develop a uniform fare structure for the entire region (including NCTD). One step towards this regional coordination is the Regional Ready Pass, which is honored on all services, including NCTD, and allows for unlimited monthly travel on all fixed route services.

Just like drivers who must merge onto different roads and freeways to reach their destination, transit riders often transfer from one route to another within the course of their trip. Timed transfers are provided at major transfer locations to improve the connection between services. This coordination helps to make a trip faster and more seamless by reducing the wait time for customers changing routes.

Having coordinated information is also essential to providing a seamless family of transit service. Traveler information for all transit services is provided on the regional transportation Internet site (www.sdcommute.com), and over the regional telephone information system. The Transit Store located in downtown San Diego is a one-stop shop for tickets, passes, tokens and information for the region's transit services. Finally, maps and timetables on MTS services are currently being converted to the same design and layout, while information on fare increases, service changes, and public hearings are posted using the same format for all MTS services. With the agency consolidation, additional opportunities exist to further coordinate the information, image and services provided by the region's transit operators.

As shown in Figure 4.1, good geographic coverage is provided throughout the region. However, this coverage is reduced at night when overall travel demand is less. In fact, only major travel corridors connecting established urban areas are served late at night. Figure 4.2 shows a similar disparity in geographic coverage on weekends when service is limited in the outlying areas of the region. Frequency, or level of service, also differs throughout the region. As presented in Figure 4.3, frequency of service is more enhanced in urbanized areas where development patterns and travel demand warrant a higher level of service.
Figure 4.1
Weekday Span of Service

Service Ends:
- After Midnight
- 10:00 - Midnight
- 8:00 - 10:00
- Before 8:00
- Peak Only

Transit Route
Figure 4.2
Weekend Span of Service

Weekend Service:
- Saturday and Sunday
- Saturday Only
- No Service

Transit Route
Figure 4.3
Peak Period Frequency of Service

Peak Frequency:
- 15 Minutes or Less
- 16 to 30 Minutes
- 31 to 60 Minutes
- More than 60 Minutes
- Not Applicable

Transit Route

Legend:
- 0
- 15,000
- 30,000
- 3.8
- 7.2

Source: SANDAG
Facilities

Operating a public transportation system requires a fleet of buses, paratransit vehicles, light rail cars and commuter rail coaches. The fleet of vehicles includes over 800 buses, about 200 minibuses and vans, 123 light rail cars, and seven commuter rail locomotives pulling 28 coaches. While the majority of buses is diesel fueled, MTS operators continue to replace their retired buses with Compressed Natural Gas (CNG) engines that emit less air pollution compared to diesel. About one half of the MTS bus fleet is currently operating on CNG. Commuter rail locomotives also operate on diesel fuel, while San Diego Trolley Incorporated’s light rail vehicles are electric. Other vehicle design innovations that are currently being incorporated into new vehicles include low floor technology on buses and light rail vehicles, automated passenger information, automatic fare collection, and an advanced scheduling and dispatching system. These innovations are designed to improve the accessibility of vehicles to senior and disabled customers, provide better customer information, and improve the efficiency and effectiveness of the transit system.

Maintenance and fueling facilities are needed to ensure that these vehicles are able to operate safely and reliably. There are several transit maintenance facilities within SANDAG’s jurisdiction that provide fleet fueling, maintenance, and storage. These facilities are located across the region to provide quick and convenient access to the various subareas of the region.

The existing transportation system includes a variety of facilities that support and enhance the operation of transit service, including High Occupant Vehicles (HOV) lanes and freeway ramps, exclusive bus lanes, signal prioritization, queue jumpers, park and ride lots, bus pads and turnouts, and preferential traffic restrictions. These facilities are discussed in more detail in the “Opportunities and Challenges” section below. Under the Regional Transit Vision, SANDAG envisions that transit priority treatments will be implemented throughout the region to promote faster, more reliable, and competitive transit services.

Finally, accessible, safe, and clean bus stops, shelters and transit centers are also important to a well operated transit system by providing comfort and convenience to passengers. Bus stops are installed at all access points to the transit system. Proper bus stop location must strike a balance between access and efficiency. Bus stops should provide convenient and easy access to major destinations, at junctions with other routes for transfer opportunities, and in areas with high ridership. Although placing more stops along a route may improve access, too many stops negatively impacts quality of service, travel time, operating costs, productivity, and efficiency. Therefore, bus stops should be strategically placed to maximize access, while the number of stops along a route should be minimized to achieve greater operating speeds, efficiency and quality of service.

Bus stop amenities are generally installed based on demand. Benches and shelters are provided at stops that demonstrate moderate demand, while transit centers are established at major transfer locations where significant ridership is demonstrated, usually along rail corridors. The RTV envisions that these transit centers will be greatly enhanced with advanced designs and customer conveniences, and will be the catalyst for higher density land use development.

Supporting Programs

Educating people about public transportation and the services available to them will always be a challenge. SANDAG and the region’s transit agencies must continuously look for fresh, original marketing opportunities to effectively promote transit as a viable alternative to driving. Our marketing departments participate in community events, launch route and service-specific
marketing programs, and participate in regional and national campaigns to promote transit usage, including the federally funded Public Transportation Partnership for Tomorrow (PT2) campaign. Essentially, we try to reach the general public with our various efforts, in hopes of capturing new riders with a message that will relate them uniquely.

Our marketing departments are also responsible for designing and producing public information materials to inform the public of our services, fare changes, new programs, and other changes to our services. Materials include the Regional Transit Map (RTM), timetables, Ride guides, brochures, Take One and Rider Alert notices, and much more. Their efforts are what are seen and heard on board vehicles, at bus stops and transit centers, on billboards in the community, in radio advertisements and press releases. Other information sources include our Internet site (www.sdcommute.com), the Transit Store (located at First and Broadway in downtown San Diego), and the customer information telephone line (1-800-COMMUTE). Information is presented in multiple languages and in various formats to reach the broadest audience.

Our security programs also help to improve the image of the transit system while promoting safety on board vehicles and at major transit centers. In addition to uniformed officers, we incorporate technology such as Closed Circuit Television (CCTV) to continuously monitor vehicle and station activity. These programs have resulted in a safer transit system and one that is generally perceived as such.

CHALLENGES AND OPPORTUNITIES

Since transit service is provided in a dynamic and constantly changing operating environment, it is important for us to understand the external factors that influence our ability to provide efficient and effective transportation services. It is important to understand the challenges we face, but it is even more important to take advantage of the opportunities that are presented towards meeting these challenges. The following section presents the greatest challenges and opportunities we face today in developing and implementing a robust transit system that will meet the mobility needs of the region.

Traffic Congestion

Challenge
Traffic congestion consistently tops the list of concerns on public opinion surveys, and for good reason; our region currently suffers from a high level of peak-period congestion. Many of San Diego’s major freeways and arterials experience severe congestion during peak travel periods, making the daily commute to work and school increasingly time-consuming. Existing transit services, which primarily operate in mixed-use traffic, must also compete in the same congested environment as solo drivers, resulting in continued declines in speed and reliability.

Transit’s operating costs are also impacted by traffic congestion. Faced with longer running times and slower speeds, more buses and drivers must be assigned to each route to maintain existing service frequencies. Over the past year, more than $1 million has been spent on additional resources to mitigate the impacts of traffic congestion, which could otherwise be spent on new and enhanced services.

Opportunity
Although congestion is expected to increase as a result of regional growth, SANDAG’s commitment to the Regional Transit Vision ensures that measures will be taken to protect transit services from congestion, and improve its competitive with the automobile.
By implementing transit priority measures at major congestion hot spots, transit service will bypass congestion, enabling it to maintain reliable and possibly faster service compared to driving alone. The following are examples of transit priorities for intersections and along major travel corridors that SANDAG will be developing over the next five years to begin implementing the Regional Transit Vision.

- **Signal Prioritization** - Signal prioritization for transit shortens or lengthens a traffic-signal cycle to allow the uninterrupted flow of an approaching bus or LRV. Signal prioritization is presently employed on C Street, Twelfth Avenue, and Commercial Street in San Diego to facilitate trolley movements.

- **Queue Jumpers** - Queue jumpers provide bus priority through congested intersections by allowing buses to depart from the bus stop and cross traffic lanes prior to the flow of traffic. Queue jumpers exist in San Diego at westbound Friars Road at Frazee Road, southbound Fourth Avenue at E Street, eastbound on Broadway at Third Avenue, and in Chula Vista on East H Street at Hidden Vista Drive, and on East Palomar Street at Heritage Park.

- **High Occupant Vehicle (HOV) and Managed Lanes** - As freeway congestion increases, HOV and managed lanes lanes will become more important for helping buses to avoid congestion, maintain schedule reliability, and reduce travel times. These lanes restrict uses to buses, carpools, and paying single occupant automobiles, and currently exist on Interstates 5 and 15. HOV lanes also exist at many freeway on-ramps in the region.

- **Freeway Shoulder Lanes** - In addition to HOV and managed lanes, SANDAG and Caltrans are exploring the use of freeway shoulder lanes. These shoulder lanes can provide an immediate transit priority along a freeway where HOV or managed lanes do not exist. A pilot project on State Route 52 between Interstates 15 and 805 is currently being contemplated.

- **Exclusive Bus Lanes** - This concept extends beyond HOV and managed lanes by creating lanes exclusively for bus use. Bus only lanes allow bus service to bypass congestion along a major travel corridor. An example of an exclusive bus lane is located at the north end of downtown San Diego where 11th Avenue merges onto northbound SR 163. Bus only lanes can also be beneficial at freeway access points and at major bus stops, such as at the onramps from University Avenue and El Cajon Boulevard to Interstate 15.

**Highlight**: SANDAG will develop transit priorities over the next five years as part of the Regional Transit Vision to address the impacts of traffic congestion on the speed, schedule reliability, cost, and competitiveness of transit service.

**Lower Density Development**

**Challenge**
Traffic congestion and dependence on the automobile is largely the result of lower density development. The region’s growing suburban employment and residential development will increase our dependence on the automobile by reducing the access, convenience, and effectiveness of transit. In addition, the low density development results in longer travel times, more trips made, and increasing amounts and duration of congestion.
Opportunity
Since SANDAG has recognized for many years that we cannot build our way out of congestion, the Regional Comprehensive Plan (RCP) represents a bold new approach to regional planning specifically focused on coordinating and integrating land use and transportation planning and development. RCP helps to minimize the impacts of growth on our infrastructure and natural resources, and maintains our quality of life. Central to the smart growth strategy is good coordination between land use and transportation development that focuses compact, efficient, and higher density development in key urbanized areas where an integrated transit system is planned to provide efficient and effective mobility between and throughout these areas. In addition, the strategy encourages the development of mixed use and pedestrian-friendly communities in order to encourage walking and bicycling for neighborhood trips and to access transit stations.

To implement the RCP, SANDAG will use smart growth criterion when evaluating and prioritizing transportation projects for funding. This approach to programming scarce transportation dollars is used to incentivize local jurisdictions into developing coordinated smart growth land use plans. We will also promote smart growth by providing incentive funds to plan and develop mixed use, walkable, and transit oriented land uses through a $25 million Smart Growth Incentive Pilot Program.

In addition, SANDAG and the region’s transit agencies actively pursue opportunities to enter into joint use development projects around major transit stations. Larger projects include mixed use development consisting of office, residential, and/or retail uses, while smaller projects often include convenience services such as dry cleaners and bank. These types of developments help make transit convenient to where people live, work, and shop. Completed joint development projects include the James R. Mills Building and the Sweetwater Union High School Adult Education Center. In addition, efforts are currently underway to develop property at the Morena/Linda Vista and Grossmont Center (La Mesa) Trolley Stations. A number of transit facilities currently under construction will offer new opportunities for joint development. The Mission Valley East trolley extension and Sprinter Coaster Rail line between Escondido and Encinitas provide a number of joint development opportunities around the new rail stations.

SANDAG and the transit agencies are proactive in reviewing development plans to ensure that transit is addressed or integrated into the design. Formal agreements (MOU) have been established between many of the region’s local jurisdictions and SANDAG that outlines a formal review process. In addition, SANDAG works with local jurisdictions to incorporate smart growth principles in community and general plan updates.

Highlight: SANDAG has committed to addressing problems related to lower density development through the development and implementation of the Regional Comprehensive Plan that focuses on the principles of smart growth, including better land use and transportation coordination.

Financial Constraints
Challenge
As a result of local, state, and federal budget deficits, funding to build new transportation projects is extremely limited. More importantly, maintaining our existing transit system is becoming an increasing challenge. Higher operating costs and lower levels of public subsidies have resulted in an annual operating budget deficit of between $30 and $45 million annually. This trend is expected to continue for the next five years. Historically, this operating deficit was addressed through the use
of nonrecurring revenues (e.g. capital or reserve funding). However, as these one-time revenue streams become depleted, it is essential to find new opportunities for funding, and/or adjust our services to a sustainable level. For the past two years, MTS services have been reduced to help address the budget deficit. These service reductions are anticipated to continue over the next few years.

**Opportunity**

Service reductions present an opportunity for streamlining the transit system by eliminating services that have become unproductive due to the changing economy, development patterns, and travel demand. In addition, the budget deficit promotes innovation in the way we fund and provide service. As a result of the existing operating deficit, SANDAG has been proactive in seeking non-traditional funding sources to maintain existing services and implementing new ones. We have been successful in securing several million dollars in federal Jobs Access Reverse Commute (JARC) and local Air Pollution Control District (APCD) funding to continue Sorrento Valley Coaster Connection service and Routes 905 and 960, as well as the implementation of a new reverse commute route from downtown San Diego to the Poway Business Park via Interstate 15, and a Coaster connection service in Carlsbad. In addition, we are evaluating opportunities to partner with residential developers to incorporate transit privileges into rents or homeowner association fees that will guarantee additional sustainable fare revenues to support service enhancements to those communities.

SANDAG and the region also have an opportunity to address our budget deficit through the extension of the TransNet sales tax measure. The existing TransNet half percent sales tax, which has been used to build and operate many transportation improvements in the region, including the trolley extension and several freeway and arterial facilities, will be expiring in 2008. An extension of the sales tax measure will provide much needed capital and operating dollars to maintain existing services while developing new services as envisioned in the Regional Transit Vision. SANDAG is expected to present an extension of this sales tax measure to the region’s voters in 2004.

**Highlight:** Budget deficits limit our ability to maintain existing services and develop new ones. We must continue to seek new funding sources and secure our existing ones, including the TransNet sales tax measure.

**Image of Transit**

**Challenge**

Our most recent household survey, conducted in 2003, determined that San Diegan’s consider transit the last resort in transportation options. This response is not surprising considering that the perceptions of transit in meeting people’s travel preferences are poor. Based on the survey, the four most important factors in people’s choice of transportation mode are: personal safety, on time arrivals, ability to avoid congestion, and reasonable travel time. The perception of bus service was significantly lower for all four mode choice factors when compared to trolley, Coaster, and the private automobile. However, transit service with dedicated right of way and more enhanced ammenities, stations, and vehicles were perceived to be fairly competitive with the automobile. In fact, trolley and Coaster service were perceived to be significantly better in avoiding congestion compared to driving alone because these services operate outside of congested freeways and roads.

**Opportunity**

The survey results teach us that a majority of San Diegan’s will use transit if it is accessible, and competitive with the private automobile in terms of convenience, reliability, and speed. In fact, 54 percent of respondents stated that they would use transit under the right circumstances. The
Regional Transit Vision (RTV) attempts to develop these “circumstances” with a network of accessible, enhanced, high speed, and reliable transit services spanning the region. These services would operate at high frequencies throughout the day, evening and weekends, and bypass congestion using dedicated transit lanes or transit priorities.

SANDAG is currently developing a project to showcase the technologies and service concepts that are part of the RTV. The Showcase Project will operate at high frequencies between San Diego State University and downtown San Diego via El Cajon and Park Boulevards. Transit priorities will be used to help the service maintain speed and schedule reliability through congested areas of the route. Innovative station designs will provide better access and customer amenities. Other projects, such as the automated fare collection system and regional transit management system will provide “smart card” fare payment technology, real time traveler information, and will enable transit operators the ability to more efficiently manage the effectiveness of the service. Once implemented, the Showcase Project will meet and exceed the perceptions of safety, reliability, speed, and avoiding congestion compared to rail transit, as well as driving alone.

Highlight: Implementation of SANDAG’s Regional Transit Vision will change the way we perceive transit from a slow, unreliable, and unattractive transportation system to one that is competitive with the private automobile in all of these factors.

Aging Population

Challenge
As the number of residents in the region continues to grow, so does its aging population. We anticipate the senior population to significantly increase as Baby Boomers prepare for retirement, and with it, the demand for senior transportation services will also increase. Today, approximately 14 percent of the region’s population consists of people that are age 60 or older. We expect this number to grow by about 3 percent by 2010. By 2030, we anticipate that 25 percent of the residents of San Diego County will be age 60 or greater. With the increasing number of aging citizens that are unable to drive, there will be a steady growth in the demand for senior transportation services. However, along with this new opportunity to capture a greater percentage of the travel market, comes the increasing importance in meeting this unmet need of providing senior and disabled services that are adequate and cost effective.

Opportunity
As mandated by federal law, SANDAG provides Americans with Disabilities Act (ADA) paratransit services to complement all general fixed route services in the region. ADA paratransit is a demand responsive, point to point service that operates similar to taxi service. As such, it is a very expensive service to provide because of the low number of passengers served compared to the number of mile and hours it operates. Due to this high cost, eligibility to use this service is limited to those who demonstrate the greatest need, as defined in the strict federal guidelines governing the safety, equality and cost-effective of the service.

In addition, transit vehicle design can help improve the accessibility and ease of boarding for people who are able to use fixed route services. Kneeling buses and low floor vehicles allow easier boarding and deboarding by providing a lower clearance to the street or trolley platform. Vehicles are also equipped with wheelchair lifts that deploy to pick up or drop off passengers who are not able to step onboard the vehicles. Finally, priority seating is provided at the front of vehicles to increase the convenience for senior and disabled riders.
Since transit can only meet the needs of the most senior and disabled populations or those who can use fixed route services, we as a region, must provide other options for the majority of seniors and disabled persons within our communities. Some lower cost transportation alternatives include ridesharing (e.g. carpool or vanpools), nonprofit transportation services (e.g. All Congregations Together, College Avenue Senior Center, and FISH), and community based volunteer driver programs (e.g. City of Vista’s Out and About program). The Coordinated Transit Services Agency (CTSA) provides technical information and assistance on specialized transportation services for transportation-disadvantaged communities, and can help with any of these as well as other transportation options. As part of the effort to coordinate transportation services, the CTSA provides information on alternative transportation, referral services, workshops and travel training, grant assistance, and coordination with existing Health and Human Services Agency (HHSA) transportation services.

**Highlight:** As the senior population continues to increase, we, as a region, must work together to develop innovative approaches to providing adequate and cost effective mobility options for this growing community.
CHAPTER 5: HOW ARE WE DOING?

GOALS AND OBJECTIVES

In 2002, SB 1703 (Peace) formally consolidated MTDB, NCTD, and SANDAG into one regional transportation agency to ensure that coordinated and well-balanced transportation solutions are planned and implemented to meet current and future travel needs. This consolidation provides an opportunity to establish region wide goals and objectives for transit service planning and development. These goals and objectives help to translate SANDAG’s Regional Transit Vision into working guidelines. The goals are generalized statements that describe the outcomes SANDAG intends to achieve. Although these goals are generally difficult to measure, they represent principles that guide the transit development process. The goals are supported by statements of objectives that will be evaluated at the end of each year to determine progress made in the previous year toward their achievement. Table 5.1 presents the goals and objectives for the next five years.
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<th>Goal</th>
<th>Statements of Objectives</th>
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| **Customer Satisfaction** - The key to success for any product or service is customer satisfaction. Since we know WHO our customers are - San Diego County residents and visitors - understanding WHAT transit services they want, WHERE they want to go, WHEN they want to travel, and WHY they need these conditions met, will help us evaluate how well we are responding to these needs, and what we have to do to improve customer satisfaction. By improving customer satisfaction, we are able to keep our existing riders and build support for more service. Satisfied customers are likely to use our services more, and encourage their family and friends to use it too. | 1. Achieve high levels of positive public feedback from surveys and individual customer comments.  
2. Investigate and respond to all public comments and requests received.  
3. Promote public participation and involve passengers and the community in seeking ways to enhance the transit system.  
4. Adjust and enhance transit services to reflect ongoing changes in population, employment, development patterns, travel demand, and travel markets.  
5. Implement service adjustments to promote faster and more reliable service.  
6. Improve quality of service, including greater schedule reliability and less overcrowding. |
| **Effectiveness** – How well we are doing our jobs can be measured by how effective our services are in meeting the region’s travel needs. Increasing our effectiveness means that more people are using our services, which helps to reduce air pollution and traffic congestion. | 1. Provide service and services levels in areas consistent with ridership demand.  
2. Maintain a high level of productivity.  
3. Balance access to transit with faster travel times when planning transit routes and stops.  
4. Continue to promote transit supportive land use and development through continued coordination with local jurisdictions, in accordance with existing practices, adopted Memoranda of Understanding (MOUs), and the Regional Comprehensive Plan.  
5. Facilitate and promote road improvement strategies, such as enhanced transit stops, signal priority, and transit only lanes, to increase transit ridership. |
| **Efficiency and Fiscal Responsibility** - As a public agency, we strive to maximize the value of the region’s investment in public transit by using tax dollars wisely to optimize the amount of service we can provide within our budget. | 1. Maintain a high level of cost effectiveness.  
2. Improve operational efficiencies through the Transportation Development Act (TDA) Performance Improvement Program (PIP).  
3. Consolidate or coordinate duplicative services.  
4. Support state, regional, and local policies that would provide the region’s transit operators with sufficient funding to provide transit services that are convenient, reliable, clean and comfortable.  
5. Adhere to the MTS Lifeline Service Plan and the NCTD area service coverage standards when developing service adjustments.  
6. If needed, develop service reductions with the goals of minimizing impacts to current passengers, maintaining service throughout the region, and maintaining network connectivity.  
7. Seek alternative funding sources for transit operations and capital improvements. |
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<td>Access and Mobility – With the warm weather and a superb quality of life, San Diegans lead active lifestyles. Our customers travel to school, work, shop, see the doctor, visit friends and family, and to play. As the region’s transit system, we must support these activities by providing appropriate levels of service throughout the county for all San Diegans, regardless of age, income, or abilities. Services between key origins and destinations should be provided as efficiently as possible, minimizing travel times, out of direction travel, and the number of transfers required.</td>
<td>In accordance with the Initial Transition Plan for the Consolidated Agency and adopted regional policies, use FY 2003 budgeted revenue hours/miles as minimum levels of service for each transit agency, and assume net service levels to be added upon completion of the Sprinter and Mission Valley East projects. Maintain and improve timed transfers at key transit centers and transfer locations. Consider innovative ways to restructure existing services to provide new transit options for existing and new customers.</td>
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<td>Image and Awareness – As part of the community, we have an obligation to put our best foot forward. We should strive to achieve an image of public transit as an attractive, safe, and viable alternative to driving alone. In addition, we should ensure that residents and visitors throughout the region know who we are, what we provide, and how to use our services.</td>
<td>Increase the awareness of public transportation in San Diego. Coordinate branding, logos, and designs to promote a regional transit system. Improve information dissemination using various media. Improve information and safety onboard vehicles and at major transit stations. Where possible, procure vehicles and develop stations that support the Regional Transit Vision. Improve maintenance of stations, stops, and vehicles.</td>
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<td>Innovation – Staying one step ahead of the game is vital towards achieving the goals listed above. Technological improvements help us improve service to our customer, increase cost effectiveness, and promote an awareness of San Diego as a forward thinking and progressive region. In addition, we should incorporate innovative thinking and problem solving in the way we develop and provide services, and conduct business.</td>
<td>Work with Caltrans and local jurisdictions to implement transit priority measures to help transit bypass congestion. Develop and implement advance technology to improve transit service and operations, including automated fare collection and real time traveler information. If applicable, implement innovative techniques in service planning and provision.</td>
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SYSTEM EVALUATION

SANDAG monitors the region’s transit system on an ongoing basis to help guide service adjustments to the region’s transit network and services in response to ever-changing mobility needs and operational environment. Formal monitoring processes have been established to regularly evaluate the efficiency and effectiveness of the transit system. These processes provide an evaluation of our transit system from the provider’s (i.e. SANDAG and transit operators) perspective. The following is a description of our processes.

- **Annual Route Monitoring Report**: This report evaluates each route’s performance in relation to other similar routes. Underperforming routes are further evaluated through a route segmentation analysis to determine the cause of low performance by time of day, day of week, and geographic segment. High performing routes are also further analyzed to better understand the reasons for the high productivity, and whether this productivity can be achieved on less productive segments of the route, or on other routes.

- **Quarterly Operations Report**: This report evaluates the productivity and cost effectiveness of the transit system by individual transit operator and mode of service (e.g. fixed route, trolley, ADA paratransit, etc.). Performance during the current quarter is compared to the same quarter of the previous year to account for seasonal fluctuations in data. The comparison identifies changes to key performance indicators, including operating cost, fare revenue, ridership, passengers per revenue mile or hour, subsidy per passenger, farebox recovery ratio, and average fare. Large fluctuations in these indicators are investigated to determine the root cause of the change.

- **Performance Improvement Program (PIP)**: As part of the Transportation Development Act (TDA) administration, SANDAG is responsible for monitoring the cost effectiveness of each transit operator receiving TDA funds. The PIP evaluates the performance of each operator against several performance targets set by SANDAG and the transit operators on an annual basis. In addition, operators commit to productivity improvement strategies to be implemented during the ensuing year, the statuses of which are evaluated through the PIP process. Finally, the operator’s status in achieving the recommendations from the previous Triennial Performance Audit is evaluated.

We complement these quantitative evaluation processes with a more qualitative understanding of the deficiencies of the transit system. Through public comments, customer correspondence, surveys, and input from stakeholders and local agencies, we gather valuable information on the successes and shortfalls of the system, as well as recommendations for improving transit service throughout the region. This information provides us with our customer’s perspective of the region’s transit system.

It is important for us to consider both the provider’s and customer’s perspectives to gain a comprehensive understanding of the factors that influence transit usage and service provision, and the deficiencies in the transit system. To ensure that we stay on the right track and respond to changes in our operating and financial environment, we must annually evaluate our efforts towards achieving our transit development goals. An evaluation of our achievements is presented below.
Customer Satisfaction – What do San Diegan’s think about our services, and what are their recommendations for improvement?

- Our most recent household survey indicates that 85 percent of San Diegans have ridden transit in the region, 51 percent have ridden it during the past year, but only 9 percent are regular riders who use it at least once a week. The primary reason for people’s choice to stop using transit was that they were able to purchase or fix a vehicle for their own use. The biggest concerns about transit service from past riders are that trips take too long, and access to origins and destinations are inconvenient.

- Our most recent survey of transit riders indicates that our customers are generally happy with the region’s transit service, but they want more of it. When asked to rate transit service in the region, 52 percent rated it as “good”, 38 percent rated it as “average”, and only nine percent rated it as “poor”. San Diego Trolley service achieved the highest ratings with 62 percent “good”. Respondents were given the opportunity to make comments about their transit service and experience. In general, twenty percent of the comments received were positive, and most of the negative comments related to needing more service (service span and frequency). Quality of service issues were primarily related to poor schedule adherence.

- In addition to our surveys, public comments are received directly from community groups, business associations, public agencies, and the general public. Each subarea of the region is assigned to a specific transit planner who serves as a liaison between SANDAG and the communities, and provides a point of contact for service and operational comments. Each comment received is investigated, responded to in a timely manner, and logged into a database for future reference. Valid suggestions for service and operational changes that can be made within our financial and operational constraints are forwarded to the transit agencies for consideration and implementation.

- Service changes are implemented three times per year (Summer, Fall, Winter). These regularly scheduled service changes provide us with the opportunity to improve the service, operation and schedules of the transit system based on our evaluation and customer comments, and to implement recommendations and actions from the Short Range Transit Plan (SRTP) and annual budget process. Often, service changes are an opportunity to improve service quality and customer satisfaction by addressing on time performance and overcrowding issues.

    We inform the public about service changes through informational notices (MTS Take Ones, NCTD Rideguides) posted onboard transit vehicles. For major service changes, we hold public hearings that are advertised in local newspapers and on board vehicles. In addition, we maintain ad hoc committees of stakeholders for specific planning studies, and present recommendations to community groups for input and review.

Effectiveness - How well are we meeting San Diego’s travel needs?

- Due to funding constraints, the region’s transit services are focused on providing the majority of service where and when it is needed the most, while maintaining a minimum level of access to urbanized areas of the region. Therefore, the transit system as a whole generally achieves a high level of ridership, relative to the amount of service provided. However, we will need to be responsive to changes in travel demand to maintain our effectiveness, particularly as travel
demand continues to move from established urban centers to newer suburban areas (both residential and employment), and employment schedules shift from the traditional work week.

One way for us to gauge our responsiveness in adjusting to changing travel demand is to track productivity measures that indicate how many passengers we carry per unit of service provided, such as passengers per hour. Overall, our productivity has declined from the previous two years, primarily due to poor economic conditions. Systemwide passengers per revenue hour declined by over 11 percent since FY 2001, from approximately 37 to 33 passengers per revenue hour. In addition to the current operating budget deficit that resulted in service reductions, a decline in the regional economy, including a rise in unemployment, tighter restrictions on border crossings, declines in tourism and various economic indicators, help explain the trend. However, these trends appear to be leveling off, as the rate of decline has decreased through FY 2003, and visitor demand began to increase.

Rail services are typically our most effective services, often carrying over 215 passengers per hour due to their large carrying-capacity, faster travel time, reliability and appeal to the commuter market. In contrast, fixed-route buses carry an average of 20 to 30 passengers per hour. Routes that serve urban areas are typically the most productive, carrying around 30 passengers per hour, while suburban routes tend to carry about 20 passengers per hour. In contrast, Americans with Disabilities Act (ADA) paratransit service is the least productive, carrying around two passengers per hour. However, as ridership on ADA service continues to grow, the productivity of these services should increase.

Aside from changes in ridership, productivity is influenced by operational constraints such as traffic congestion. As congestion increases, speeds decrease; increasing the time it takes for a bus to complete its scheduled trip. With enough congestion, travel time increases to the point that more buses are required to maintain a route’s frequency and schedule. In contrast, speeding up a route can ultimately result in fewer buses being required to maintain the route’s schedule. In addition, rail services and buses on dedicated right of way can achieve higher productivity due to their ability to avoid congestion.

SANDAG’s Transit First Now! project focuses on speeding up transit service through congested areas by implementing transit priority measures, as described in Chapter 4, that allow transit vehicles priority movement through a congested roadway or intersection. Several priority measures have been implemented in the region, including two transit “T” lights in downtown San Diego, trolley priority through downtown San Diego, a queue jumper on Friars Road in Mission Valley and on H Street in Chula Vista, and the High Occupancy Toll (HOT) lanes on Interstate 15. In addition, Transit First Now! includes a program to identify and consolidate redundant bus stops along major regional routes to increase speeds with minimal impact on access. Since bus stop consolidation is the cheapest and quickest way to improve service, we are currently developing bus stop location guidelines, as part of Transit First Now!, that will balance the need for access while improving service efficiency and effectiveness. Ultimately, we can expect to see an increase in ridership by improving transit service through transit priorities and effective bus stop placement.

As with bus stops, a successful bus routing requires a delicate balance between providing convenient access and direct service. Denser urban environments allow for high frequency, streamlined bus service to be focused along major travel corridors, increasing the effectiveness
of transit. In contrast, low density suburban areas with discontinuous street patterns require
bus service to be spread throughout the community, traversing along neighborhood streets,
which results in infrequent and indirect bus service. Therefore, we try to increase the
effectiveness of transit not only by adjusting service to meet changing land use and travel
patterns, but also by working with developers and local jurisdictions to influence urban
development towards more compact and efficient development patterns, which promote the
use and effectiveness of transit services.

At the highest level, SANDAG promotes efficient land uses and development through the
Regional Comprehensive Plan, which sets policies and guidelines that positively influence the
future growth of the region towards a denser and more efficient physical environment. To
implement these policies, SANDAG planners work with local jurisdictions to develop community
plans and projects that support “smart growth” principles. General plan updates for the City of
Chula Vista, the County of San Diego, and San Diego have or are in the process of incorporating
these principles in their visions and plans for the future. Large development projects such as
Otay Ranch in Chula Vista have been developed with a focus on compact local neighborhoods
and an emphasis on transit. In addition, SANDAG planners systematically review development
plans submitted to local jurisdictions, and recommend improvements that promote the
effectiveness of transit in serving the development. Finally, SANDAG recently awarded $1
million in TransNet funding to plan and construct walkable community demonstration programs
throughout the region.

Efficiency and Fiscal Responsibility – Are we getting the biggest bang for our buck?

As a public agency, we should continue to strive to maximize the value of San Diego’s
investment in public transit by maximizing the amount of service we can provide within our
budget. Achieving this goal is particularly important in our current environment of fiscal
constraints. SANDAG’s Performance Improvement Program (PIP) is designed to monitor the
efficiency of the region’s transit operators, and to develop strategies for improving
inefficiencies within each transit operation. For FY 2003, transit operators focused on increasing
ridership and on-time performance of the service by developing better ways to track and
manage ridership and operating data to make more informed and timely decisions on service
provision.

One way for us to gauge our service optimization is to track efficiency measures that evaluate
cost per unit of service provided, such as subsidy per passenger. Overall, our productivity has
dropped from the previous years, due to service reliability issues and extraneous economic
circumstances. Systemwide subsidy per passenger has increased by over 50 percent since 2001,
primarily due to continuing increases in operating costs. Higher contract costs, fuel, security,
insurance, repair and maintenance and personnel costs have all contributed to this increase.
Although MTS implemented a fare change in April 2001 (and July 2003), increases in fare
revenue did not match the increases in operating cost. Combined with declines in ridership,
subsidy per passenger increased.

As a result of increased operating costs and reductions in public subsidies, the Metropolitan
Transit System (MTS) is facing an annual operating deficit between $30 and $45 million. This
budget deficit requires that the region make hard decisions to balance the budget. Some of the
tools available for balancing the budget are: use of non-recurring revenues, fare increases, and
service reductions. Each has a negative impact on ridership, so our challenge is to minimize the impact while maximizing the cost savings.

Since FY 2003, around $2 million\(^4\) in service reductions have been made to the MTS, including: the discontinuation of general public demand responsive services in El Cajon, East County, La Mesa, Mid City, and Spring Valley; discontinuation of public subsidies for specialized services such as Padres Express, Poway Airporter, and the Chula Vista Nature Center Shuttle; and the elimination of unproductive trips throughout the MTS.

Access and Mobility – Can people get where they want when they want?

While productivity and efficiency are important, we must also provide the appropriate levels of service to all parts of the region for all San Diegans, regardless of age, income, or abilities. A Lifeline Service Plan (LSP) was developed for the MTS in 2002 that established guidelines for reducing service during times of fiscal constraints. These guidelines state that services should be reduced based on productivity, however, a minimum level of service should be preserved throughout areas currently served to provide lifeline service to and from those areas. In addition, NCTD has categorized certain routes as “Access” routes, which signify that the primary focus of these services is to provide minimum access throughout the area, not productivity. The LSP and “Access” categorization will be expanded to cover the entire region.

Although access is important, so is the ease of moving throughout the region. This mobility can be improved by ensuring that schedules and frequencies between connecting services are coordinated to provide timed transfers at major transfer locations and similar spans of service so passengers are not stranded half way through their trip. As part of the Fast Forward Service Plan, NCTD implemented a timed transfer system that allows passengers to easily and efficiently transfer from one route to another at transit centers and other specified locations. However, as a result of budget deficits, service spans have been reduced on many of the MTS routes, including the trolley. In addition, schedules have been shifted to improve operational efficiency. As a result, several key transfers, particularly morning southbound connections at Old Town Transit Center, have been lost. SANDAG continues to work with MTS transit operators to reestablish these transfer opportunities, if possible.

Fixed route transit is designed to serve the general public. However, due to physical abilities, it is not a viable transportation option for many seniors and persons with disabilities. While complementary Americans with Disabilities Act (ADA) paratransit service is provided to meet the needs of the most disabled, it is often cumbersome to use, requiring prior certification, advanced scheduling of trips, and flexible time spans for pick ups and drop offs. Innovative approaches to providing community transportation services have been established, such as the City of Vista’s Out and About service which relies on volunteer drivers to transport seniors and other citizens to medical appointments or the grocery store. As the senior population in the region increases, we must focus more and more efforts on researching and implementing these and other solutions to the issue of mobility for seniors and persons with disabilities.

\(^4\) Annualized subsidy savings.
Image and Awareness – What do San Diegans know and think about the region’s transit services?

In our most recent household survey, 42 percent of occasional, past and non-riders view transit service as the last alternative. In contrast, 54 percent of respondents stated that they would use transit regularly under the right circumstances. To help maximize service usage from this potential market, we must change the image of transit from a basic transportation option of last resort to the first choice of transportation in the region.

Educating people about public transportation and the services available to them is always a challenge. The region’s transit agencies have embarked on several new marketing campaigns such as NCTD’s Coaster/Sprinter/Breeze branding, MTS’ “Easy Going” campaign, and the American Public Transit Association’s (APTA) Public Transportation Partnership for Tomorrow (PT2) campaign. In addition to these global marketing campaigns, SANDAG and the transit agencies also promote specific services in the hopes of increasing ridership from key markets.

Several different media are used to market transit and disseminate information, including SANDAG and transit agency internet sites (www.sandag.org and www.sdcommute.com), billboards, radio and television spots, telephone information, and printed materials. Specific information on service changes is provided to customers on board vehicles and at key locations through Rider Alerts, Rideguides, and Take Ones. Information is usually presented in English and Spanish, however, recent studies indicate that several more languages should be targeted, particularly in low income communities.

Seventy five percent of the household survey respondents were able to name at least one transit service in the region, namely the trolley, followed by MTS, the Coaster and NCTD. When asked what media they would turn to for information on transit services, 43 percent indicated the Internet, followed by the telephone (34 percent), and on board brochures (12 percent). In the future, we should target our audience using the most effective and cost efficient media available to market and provide information about our services.

Innovation – Are we leading the pack or following the herd?

Technological innovation can drastically enhance the way we provide information and services. The region’s transit agencies are currently developing a regional Automated Fare Collection (AFC) system and Regional Transit Management System (RTMS) that will help us plan and operate our scarce transit resources smarter and more effectively. The AFC will consolidate the region’s fare payment process under a single, united payment program to promote a seamless transit system to our customers, improve revenue distribution to the operators, and enhance our information gathering capabilities. Based on “smart card” technology, the AFC will improve the ease and convenience of fare payment for the customer, allow SANDAG to develop more comprehensive fare payment schedules, decrease bus dwell times at stops, improve travel demand data collection, and opens the door to opportunities to partner with public and private entities on “e-purse” applications that allow several separate debit accounts, such as a transit pass, parking credits, telephone card, etc., to be stored on one card. The initial phases of the AFC system is currently being implemented, however, the project team is planning a series of pilot programs to test the functionality and customer response for the system prior to full implementation.
The RTMS is a multi-operator system that will provide consolidated fleet management and tracking for the region’s transit operators. This technology allows for automatic vehicle location, computer aided dispatch, real time traveler information, on board passenger information, and enhanced data collection opportunities. SANDAG awarded a contract in 2001 to demonstrate the technology on a limited number of vehicles, including the Coaster, Poway’s transit services, and Route 992 (the Airport Flyer).

The Regional Transit Vision is SANDAG’s strategic plan to develop a world class transit system for the San Diego region. The RTV centers around an innovative system of bus rapid transit (BRT), signal priorities, and improved customer amenities. SANDAG and Caltrans are currently working on several efforts to implement this vision, including the Interstate 15 managed lanes and transit centers, the AFC and RTMS as described above, Transit First Now! congestion hot spot treatments, as well as a possible demonstration project on the use of freeway shoulder lanes to bypass congestion on freeways. In addition, studies are underway to develop and implement BRT services from San Diego State University to downtown San Diego, South Bay to downtown San Diego, and in the Golden Triangle.

SANDAG is proactive in seeking nontraditional funding to enhance our services, particularly during this era of financial constraint. During the past year, we have been successful in receiving several million dollars in federal Jobs Access Reverse Commute (JARC) and local Air Pollution Control District (APCD) funding to continue Sorrento Valley Coaster Connection service and Routes 905 and 960. In addition, this funding will support the implementation of a new reverse commute route from downtown San Diego to the Poway Business Park via Interstate 15, and a Coaster connection service in Carlsbad.
CHAPTER 6: SHORT RANGE TRANSIT WORK PROGRAM

The growing population and expansion of suburban development is resulting in increased trip-making and higher levels of traffic congestion. To address these growing pains, and preserve our quality of life, SANDAG has developed a Regional Comprehensive Plan (RCP) and Regional Transit Vision (RTV) that represent a bold new approach to improving the region’s mobility through better coordination between transportation and land use planning. The RCP focuses our future growth in urbanized areas characterized by compact, efficient, and higher density land uses to reduce our infrastructure needs and preserve our natural resources. To provide mobility within and between these “smart growth” areas, SANDAG adopted the complementary RTV as the framework for transit development in the region, and the Regional Transportation Plan (Mobility 2030) to serve as the long range (5-30 years) infrastructure and service improvement strategy for implementing the RTV.

Establishing a short range (0-5 years) transit work program to support the RTV is the purpose of the regional SRTP. With unlimited financial resources, we would be able to provide fast, frequent, and flexible service 24 hours per day, seven days per week, to all areas of the region. However, in reality, the region is faced with severe financial constraints that limit how, and to what extent we can implement the RTV in the short term. In addition, this funding deficit hinders our ability to provide basic mobility to our existing riders. Therefore, we must adopt an approach to developing the transit system that balances the basic mobility needs of our current riders with developing the world class transit system envisioned in the RTV.

As stated in Chapter 3, improving the speed and schedule reliability of service, as well as avoiding traffic congestion, are the most important transit improvements for both existing and potential riders. For existing riders, improving the access of our services, both geographic and temporal (days and hours of service) is also an important factor, since they are largely transit dependent. For our potential market of choice riders, we must focus on providing a travel experience that is competitive with the automobile. Therefore, our investment strategy should focus on improving the speed and reliability of transit service, while balancing the need to improve transit access with the need to provide a competitive travel experience.

This chapter outlines a short range transit work program aimed at achieving a balanced transit improvement strategy. The first part of the work program identifies specific recommendations for improving basic mobility for our existing riders, including the FY 2005 Regional Service Implementation Plan that presents the new services proposed for FY 2005 funding consideration. The second part of the work program describes the specific efforts we are undertaking to move toward the RTV.

IMPROVE BASIC MOBILITY

As Chapter 4 states, the availability of transit service varies depending on time of day and day of week. Although a high level of service is provided most of the time in the established urban areas of the region, other communities experience a significant reduction in service late at night and on weekends. In addition, the quality of service varies by route. Many routes experience overcrowding during peak work and school hours, while other routes demonstrate low schedule reliability due to congestion or high levels of wheelchair boardings. Finally, as our population continues to age, more importance will need to be placed on providing additional transportation options for seniors.
The first step toward achieving the Regional Transit Vision is to improve the basic mobility for our current ridership as identified below.

Gaps in Service

As presented in Chapter 3, the propensity of people to use our existing transit system is generally greater in communities with low income and auto ownership. Figure 6.1 shows the areas of high transit propensity within the region. Chapter 3 also identified areas within the region that have a high level of trip attraction, including employment parks, retail centers, major regional attractions, and other destinations. Figure 6.2 shows the concentration of trip attractions throughout the region. As shown on Figure 6.3, areas of high transit propensity\(^5\) are generally located in urbanized areas south of Interstate 8, as well as Oceanside and Escondido. In contrast, major travel destinations\(^6\) are dispersed throughout the region.

Table 6.1 evaluates the service effectiveness between areas of high transit propensity (origin) and areas with greater trip attraction (destination). Twenty percent of the origin/destination pairs have “Good” service effectiveness based on fast travel times, easy connections, high service levels when needed, while 42 percent have “Average” effectiveness, and 38 percent have “Poor” effectiveness. Although service effectiveness between many of the travel pairs is considered “Poor”, due to indirect routing, slow travel times, and limited service when needed, not all of these travel pairs warrant service improvements.

Table 6.2 shows the travel demand between each origin/destination pair. As presented, only eight percent of the travel pairs demonstrate high travel demand, while the travel demand between a majority of origins and destinations is low. With our limited financial resources, we should ensure that transit service between areas of high travel demand is “Good” before improving service between areas with low demand.

Table 6.3 compares service effectiveness with travel demand. Although service effectiveness is generally consistent with travel demand\(^7\), the following travel pairs are identified as having lower service effectiveness compared to their demand, and should be prioritized for service enhancement.

1. Mid-City to Mission Valley - While a significant amount of service is provided in Mid-City and Mission Valley, there is little direct service connecting these two areas. Although Routes 6 and 13 provide a connection between Mid-City and Mission Valley, their routing requires passengers to travel out of direction before reaching their destination. For example, Route 13 riders must travel via San Diego State University to reach Mission Valley. In addition, access from Mid City to the trolley is inefficient, despite being encircled by light rail lines. With the implementation of the Mission Valley East trolley extension, bus service in the area will be restructured, providing an opportunity to improve the connection between Mid-City and Mission Valley, and access to the trolley.

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\(^5\) Areas with both low income and low auto ownership.
\(^6\) Areas with 100 or more daily trips per acre.
\(^7\) Travel pairs demonstrating high travel demand generally have good service effectiveness, while areas with low travel demand have poor service effectiveness.
Figure 6.1
Concentration of Transit Propensity

Vehicles per Household
- Less than 1.5

Household Income
- Less than $30,000
Figure 6.2
Concentration of Travel Destinations

Trip End Attractions per Acre
- Less than 10
- 10 to 50
- 50 to 100
- 100 to 200
- Greater than 200
Figure 6.3
Combined Concentrations of Transit Propensity and Travel Destinations

- Transit Propensity
- Travel Destinations
### Table 6.1 - Service Effectiveness Between Origin/Destination Pairs

#### Concentrations of Travel Destinations

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- **GOOD** (Fast travel times, easy connections, service throughout the day, nights and weekends, high frequencies on major travel corridors during peak hour (15 minutes or less))
- **AVERAGE** (Medium travel times, up to two transfers required, limited night and weekend service, moderate frequencies on major travel corridors during peak hour (30-60 minutes))
- **POOR** (Slow travel times, indirect routing, more than two transfers required, none to very limited night and weekend service)
Table 6.2 - Travel Demand Between Origin and Destination Travel Pairs

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- **HIGH** (Greater than 20,000 trips per day)
- **MEDIUM** (Between 10,000 and 20,000 trips per day)
- **LOW** (Less than 10,000 trips per day)
### Table 6.3 - Comparison of Service Effectiveness and Travel Demand

| Concentrations of Travel Destinations | Oceanside | Vista/San Marcos | Escondido | N. County Coastal | Poway Business Park | Sorento Valley/Golden Triangle | Mira Mesa | Kearny Mesa | Pacific Beach/La Jolla | Ocean Beach | Linda Vista | Mission Valley | El Cajon/Santee | La Mesa | Mid City | Downtown SD | National City/W. Chula Vista | Bonita/E. Chula Vista | Imperial Beach | San Ysidro |
|--------------------------------------|-----------|------------------|-----------|-------------------|---------------------|------------------------|-----------|-------------|------------------------|------------|-------------|-----------------|-----------------|---------|----------|----------------|--------------------------|-------------------------|-------------------|
| Oceanside                            |           |                  |           |                   |                     |                        |           |             |                        |            |             |                 |                 |         |          |                |                          |                          |                   |
| Escondido                            |           |                  |           |                   |                     |                        |           |             |                        |            |             |                 |                 |         |          |                |                          |                          |                   |
| Downtown SD                          |           |                  |           |                   |                     |                        |           |             |                        |            |             |                 |                 |         |          |                |                          |                          |                   |
| Mid City                             |           |                  |           |                   |                     |                        |           |             |                        |            |             |                 |                 |         |          |                |                          |                          |                   |
| Midway/Sports Arena                  |           |                  |           |                   |                     |                        |           |             |                        |            |             |                 |                 |         |          |                |                          |                          |                   |
| Euclid/Southeast SD                  |           |                  |           |                   |                     |                        |           |             |                        |            |             |                 |                 |         |          |                |                          |                          |                   |
| Lemon Grove                          |           |                  |           |                   |                     |                        |           |             |                        |            |             |                 |                 |         |          |                |                          |                          |                   |
| El Cajon                             |           |                  |           |                   |                     |                        |           |             |                        |            |             |                 |                 |         |          |                |                          |                          |                   |
| National City/W. Chula               |           |                  |           |                   |                     |                        |           |             |                        |            |             |                 |                 |         |          |                |                          |                          |                   |
| San Ysidro                           |           |                  |           |                   |                     |                        |           |             |                        |            |             |                 |                 |         |          |                |                          |                          |                   |

**Legend:**
- **POOR** (Service effectiveness is appropriate for travel demand)
- **MODERATE** (Service effectiveness is marginally appropriate for travel demand)
- **GOOD** (Service effectiveness is not appropriate for travel demand)
**Recommendation:** Given the short distance, and high travel demand, particularly with a relatively high senior population in Mid City, and destinations in Mission Valley, including a senior center in the Robinson May store at Mission Valley Center, direct service should be provided between Mid-City and Mission Valley. In addition, access to the trolley should be improved.

**Euclid/Southeast San Diego to National City Area –** Although direct service is provided from the Euclid area to National City via Route 603, service is only provided every 30 minutes from 6:00 a.m. to 8:00 p.m. on weekdays. On Saturdays, service is only provided from 6:30 a.m. to 7:00 p.m., and Sunday service deteriorates to every 60 minutes from 9:30 a.m. to 6:30 p.m. Since Route 603 provides feeder service to and from the Euclid Avenue Trolley Station and Plaza Bonita’s transfer center, the limited service span and frequency severely restricts Euclid and Southeast San Diego residents from accessing adjacent communities and using regional services at night and on weekends.

**Recommendation:** Considering the high transit propensity within the area, Route 603 service should be enhanced, particularly on weekends.

**Internal Travel within National City Area –** National City is an established urban community that houses higher density residential, several retail and commercial corridors, a regional shopping center, and industrial/manufacturing areas. Travel demand is high all day, even on weekends, when residents take trips to community centers, churches, and the weekly swap meet held at National City Boulevard and State Route 54. However, service is limited on the three National City Transit services (Routes 601, 602, and 603), which consistently prove to be some of the most productive services within the region’s transit system. In addition, there is currently no service to the industrial area on the west side of National City (west of Interstate 5).

**Recommendation:** Given the high transit propensity, travel demand, and compact development patterns, the level of service should be enhanced on Routes 601 and 602 on weekdays and possibly weekends. In addition, National City Transit should propose expanded service to cover the industrial area west of Interstate 5.

**San Ysidro Service –** Routes 929, 932, and the trolley Blue Line provide direct service from San Ysidro to Western Chula Vista/National City and destinations further north. However, only one route (Route 905) provides feeder service to these regional routes, as well as local circulation to retail, employment, and commercial centers within the community. In addition, Route 905 only operates from 5:00 a.m. to 7:00 p.m. on weekdays, and often experiences severe overcrowding.

**Recommendation:** Route 905 service should be enhanced, particularly on weekends and at night, to better serve the travel demand within, into, and out of San Ysidro.

In addition, the following regional service gaps have been identified through subarea studies and customer input. For more detailed information on local service gaps in North County, please refer to the FY 2005-2010 Service Implementation Plan for NCTD in the technical appendix.
Weekend Service on Coaster – Although systemwide ridership has declined over the last two years, Coaster ridership continues to increase. It is easy to understand the increase considering the deteriorating traffic conditions on Interstate 5 combined with the convenient and pleasant travel experience on the Coaster. In FY 2003, Coaster ridership reached a record high carrying over 1.3 million annual riders, representing a 5 percent increase over FY 2002. Despite the high demand, Coaster service operates limited hours on the weekdays, and even less service on Saturdays. No Sunday service is currently provided.

Recommendation: Since Sunday service on the Coaster ranked fourth highest in NCTD’s service priorities table\(^8\) and it provides relief along a major regional corridor, it should be prioritized for funding consideration.

Late Night and Weekend Service on Express Routes – Enhanced service on existing express routes was identified as a primary unmet need in our recently completed Welfare to Work Transit Study. This need stems from the fact that most CalWORKs\(^9\) participants and low income populations live south of Interstate 8 and travel long distances to employment opportunities further north. In addition, many work night and weekend shift schedules. Focus groups of CalWORKs clients indicated that the same trip made on an express service during the weekdays would take nearly four times as long on the weekends.

Recommendation: Based on the transit demand from late night and weekend shift workers, SDTC should propose expanded night and weekend express services when and where it is appropriate, particularly on Routes 30, 50, and 150.

Enhanced Summer Service on Routes 9 and 34 – Travel to Sea World, Belmont Park, and the beaches of San Diego is greatly increased during the summer months. In response, weekend frequencies were traditionally increased on Routes 9 and 34 to provide additional service to these regional attractions. As a result of budget deficits, summer service has been discontinued, resulting in severely overcrowded trips and poor schedule reliability.

Recommendation: Summer service should be reinstated on Routes 9 and 34 to account for the increased travel demand during the summer months.

Internal Travel within Downtown San Diego – As the traditional transit hub for the MTS, downtown San Diego is served by over 25 bus routes, the Coaster, and the trolley Blue and Orange Lines. However, most of the service is focused on the Broadway corridor as the traditional transit hub of the MTS. As development continues throughout downtown, the need will increase for convenient and accessible transit service from the residential neighborhoods of Little Italy, the Marina District, East Village, and Cortez Hill to downtown destinations such as Little Italy, the Gaslamp District, East Village, Petco Park, and Balboa Park.

Recommendation: As a result of new residential development, and changing travel patterns, SANDAG should consider restructuring transit services within, into, and out of downtown San Diego to provide better internal circulation and more efficient interregional connections. A

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\(^8\) Included in NCTD’s FY 2005-2010 Service Implementation Plan (SIP).

\(^9\) State of California’s program to transition welfare recipients to work.
more detailed discussion of possible alternatives is presented in the “Developing New Services” section below.

¶ South Bay to Old Town or Fashion Valley Transit Center Express – Many existing Blue Line trolley riders currently travel north to downtown San Diego purely to transfer to connecting services headed further north. In addition, residential development throughout South Bay has increased peak hour travel demand and congestion along Interstates 5 and 805.

Recommendation: SANDAG should consider developing an express service from South Bay to Old Town or Fashion Valley Transit Center allowing existing passengers to bypass downtown congestion along Broadway. This service would also provide congestion relief along the north/south corridors in South Bay, and would address some of the capacity issues currently experienced on the trolley Blue Line.

¶ Weekend Service on Routes 318 and 336 – With rapid development from Oceanside to Escondido, travel demand along State Route 78 continues to increase. Once completed, the Sprinter rail service will provide a fast and reliable option for east/west travel along this corridor. In the near term, however, existing services should be enhanced to provide a short term solution to the demands of today.

Recommendation: Sunday and holiday service should be enhanced on Routes 318 and 336 to provide hour service throughout the day.

¶ Carmel Valley Service – As a result of the employment and residential development in the Carmel Valley area, including new affordable housing complexes, transit demand to and from this area is increasing. While employment is cluster along El Camino Real and High Bluff Drive, residential areas are difficult to serve due to the low density development and discontinuous street patterns.

Recommendation: Provide peak hour service to employment areas and a lifeline link between Carmel Valley residents and the regional transit network.

¶ Temecula to Escondido Express – Due to the high cost of housing in San Diego County, many employees working in the region are relocating to more affordable housing options in western Riverside County. This jobs-housing imbalance has resulted in increased traffic along Interstate 15 from Temecula to Escondido. To help address this issue, SANDAG and the Western Riverside Council of Governments (WRCOG) have partnered on the I-15 Interregional Partnership Project (I-15 IRP) to identify long term land use solutions to address the jobs-housing imbalance, as well as short term transportation solutions to address the increasing congestion along Interstate 15.

Recommendation: The I-15 IRP has identified express transit service between Temecula and Escondido, as well as distributor shuttles at key destinations, as transportation solutions to the congestion problem along Interstate 15 between Riverside and San Diego Counties.
Service Deficiencies

To enhance service for our existing riders and increase ridership on our transit system, we must also address the following deficiencies in the quality of service:

- Overcrowding – Overcrowded buses generally occur during peak work and school hours of the day, and have a direct and indirect effect on ridership. Not only do they deter potential passengers from using the service, the capacity constraint limits ridership despite higher demand. Overcrowding can be addressed by increasing service levels where and when it is needed, or by restructuring adjacent routes to accommodate the additional demand. SANDAG and the transit operators should work together to address overcrowding issues as efficiently and effectively as possible.

- Maintain and Improve Transfer Opportunities – Timed connections at convenient location allow riders to efficiently transfer between services and complete their trip in a timely manner. This concept is particularly important when service frequencies are low (greater than 15 minutes). As part of NCTD’s Fast Forward Plan, timed transfers were implemented at all key transfer locations to improve connections between services. MTS service schedules are also developed around a “pulse” concept in which all routes arrive and depart a transfer center at the same time, allowing for transfers between services to be coordinated and timed.

As a result of poor schedule reliability, as well as service and schedule adjustments, important timed transfers have been lost, requiring passengers to wait up to 60 minutes for the next bus. Since the Regional Transit Vision is developed around a concept of interconnected services, it is important that timed transfer opportunities are maintained and improved at major regional transfer locations, including transit centers in El Cajon, Escondido, Euclid, Fashion Valley, Grossmont Center, H Street, Oceanside, Old Town, and University Towne Centre.

FY 2005 Regional Service Implementation Plan

With limited financial resources, we are faced with difficult choices when deciding future transit investments. Each year, SANDAG develops its Regional Service Implementation Plan to guide system improvements to address gaps in service and implement the concepts of the Regional Transit Vision. However, due to our current funding constraints, we must adjust and reduce existing services at the same time we are working to improve basic mobility and implement the concepts of the Regional Transit Vision.

Each year, the region’s transit operators submit their individual Service Implementation Plans (SIP) to SANDAG for consideration. The SIPs list the proposed new services each transit operator recommends for implementation to meet existing service gaps and deficiencies within their operations. SANDAG combines these individual SIPs into a Regional SIP that includes improvements proposed by transit operators as well as SANDAG staff. Proposals for new services are then prioritized and recommended for funding consideration based on a regional evaluation process (currently being developed by SANDAG and the region’s transit agencies), and availability of new funding. The RSIP is forwarded through SANDAG’s annual budget development process for funding.

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10 A copy of NCTD’s FY 2005 Service Implementation Plan that outlines short and mid term improvement proposals for the North County area is included in the technical appendix.
consideration and adoption. New services are then implemented during one of the regularly scheduled service changes (Summer, Fall, and Winter) held throughout the year.

Table 6.4 presents the proposed new services for FY 2005 funding consideration. Since a new process for evaluating and prioritizing these services is currently being developed, as a result of agency consolidation, the service proposals in Table 6.4 have not been prioritized. Funding priorities for FY 2005 will be developed during the budget development process beginning in January 2004.
<table>
<thead>
<tr>
<th>Operator</th>
<th>Route</th>
<th>Service Proposal Descriptions</th>
<th>Pass/Hour</th>
<th>Sub/Pass</th>
<th>Annual Subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDTC</td>
<td>2</td>
<td>Frequency increase from 5:30a-7:30a and 2:00p-5:00</td>
<td>84.3</td>
<td>$0.41</td>
<td>$17,513</td>
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<td>SDTC</td>
<td>7</td>
<td>Frequency increase school days only</td>
<td>67.2</td>
<td>$0.45</td>
<td>$14,024</td>
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<tr>
<td>SDTC</td>
<td>34</td>
<td>Partially reinstate summer weekend supplemental service</td>
<td>24.0</td>
<td>$1.91</td>
<td>$42,688</td>
</tr>
<tr>
<td>SDTC</td>
<td>44</td>
<td>Frequency increase school days only</td>
<td>86.3</td>
<td>$0.69</td>
<td>$10,646</td>
</tr>
<tr>
<td>NCTD</td>
<td></td>
<td>Coaster Existing routing. Weekdays (summers only), add 1 new round trip only</td>
<td>178.0</td>
<td>$2.24</td>
<td>$82,882</td>
</tr>
<tr>
<td>NCTD</td>
<td>318/336</td>
<td>Existing routing. Sunday/Holidays, add 13 trips</td>
<td>15.0</td>
<td>$2.91</td>
<td>$29,158</td>
</tr>
<tr>
<td>NCTD</td>
<td>325</td>
<td>Weekdays, extend route to Town Center North from 6:00 am to 8:00 pm. Saturdays, extend route to Town Center North from 6:00 am to 6:00 pm.</td>
<td>14.0</td>
<td>$2.88</td>
<td>$138,329</td>
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<tr>
<td>NCT</td>
<td>601</td>
<td>24th St. Trolley Sta. To 43rd St./Delta to Plaza Bonita (WEEKDAYS ONLY) Improve Frequency</td>
<td>38.0</td>
<td>$1.12</td>
<td>$144,388</td>
</tr>
<tr>
<td>NCT</td>
<td>602</td>
<td>24th St. Trolley Sta. To Paradise Hills to Plaza Bonita (WEEKDAYS ONLY) Improve frequency</td>
<td>40.4</td>
<td>$1.07</td>
<td>$149,211</td>
</tr>
<tr>
<td>NCT</td>
<td>603</td>
<td>Plaza Bonita To Euclid Trolley. Sta. (SUNDAYS ONLY) Improve frequency</td>
<td>26.7</td>
<td>$1.65</td>
<td>$22,858</td>
</tr>
<tr>
<td>CVT</td>
<td>706</td>
<td>&quot;The Baytowner&quot; Bidirectional loop route via Bayfront Transit Center, (Civic Center) Increase frequency and restructure existing service</td>
<td>30.0</td>
<td>$1.09</td>
<td>$510,377</td>
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<tr>
<td>CVT</td>
<td>712</td>
<td>Palomar Transit Center to Southwestern College. Route Extension and improved frequency of service</td>
<td>33.9</td>
<td>$1.23</td>
<td>$471,954</td>
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<tr>
<td>CVT</td>
<td>707</td>
<td>H Street Transit Center to Sharp Hospital via H Street. New weekend service (Sundays)</td>
<td>16.0</td>
<td>$4.09</td>
<td>$37,930</td>
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<tr>
<td>CVT</td>
<td>704</td>
<td>H Street Transit Center to Southwestern College via H Street. New weekend service (Sundays)</td>
<td>35.9</td>
<td>$1.83</td>
<td>$37,970</td>
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<tr>
<td>MCS 800</td>
<td>815</td>
<td>Existing Routing. Increase frequency from 60-min to 30-minute frequency weekends/holidays 10:00 AM-5:30 PM only</td>
<td>33.0</td>
<td>$0.26</td>
<td>$7,066</td>
</tr>
<tr>
<td>MCS 800</td>
<td>864</td>
<td>Existing Routing. Frequency increase from 60 minutes to 30 minutes selected trips - (weekends &amp; holidays)</td>
<td>23.8</td>
<td>$2.25</td>
<td>$43,184</td>
</tr>
<tr>
<td>MCS 900</td>
<td>908</td>
<td>Existing Routing. Increase frequency from 30 to 15-minute frequency weekends 9:30 AM-5:30 PM</td>
<td>31.9</td>
<td>$0.38</td>
<td>$40,067</td>
</tr>
<tr>
<td>MCS 900</td>
<td>929</td>
<td>South From National City Blvd to Iris Ave. Trolley Station. Increase frequency from 30 to 15-minute frequency weekends 10:30 AM-5:30 PM</td>
<td>33.4</td>
<td>$0.56</td>
<td>$56,068</td>
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<tr>
<td>MCS 900</td>
<td>932</td>
<td>South from San Ysidro Int’l Boarder to E St. Trolley Station Frequency increase from 30- to 15-minute frequency weekends (7 hour period roughly 10:30am-5:30pm)</td>
<td>36.0</td>
<td>$0.43</td>
<td>$49,464</td>
</tr>
<tr>
<td>MCS 900</td>
<td>955</td>
<td>Existing Routing. Increase frequency from 30 to 15-minute frequency weekends 10:00 AM-5:00 PM</td>
<td>33.3</td>
<td>$0.62</td>
<td>$65,758</td>
</tr>
<tr>
<td>Carmel Valley</td>
<td></td>
<td>C-Side Shuttle New service from Solana Beach Coaster to Carmel Valley via Camino Del Mar and Del Mar Heights Road. (60 minute frequency from 6:00 am to 6:00 pm)</td>
<td>5.0</td>
<td>$11.57</td>
<td>$526,203</td>
</tr>
<tr>
<td>Carmel Valley</td>
<td></td>
<td>SV/CV Shuttle New peak hour only service from Sorrento Valley Coaster to Del Mar Highlands Center via El Camino and High Bluff. (30 minute frequency from 5-8 am and 4-7 pm)</td>
<td>11.0</td>
<td>$4.79</td>
<td>$80,691</td>
</tr>
<tr>
<td>Carmel Valley</td>
<td></td>
<td>FAST-SV/CV Shuttle FAST service from 6am-8pm on weekdays and 9 hours on Saturday, and SV/CV Coaster Connection service using one FAST vehicle during weekday peak hours.</td>
<td>6.0</td>
<td>$6.91</td>
<td>$315,495</td>
</tr>
</tbody>
</table>

**TOTAL:** $2,893,923

* Option 1: Recommend implementing both services together, but can be separated. ADA complementary service of $100,000/annually is assumed in the C-Side Shuttle proposal. SV/CV Shuttle is similar service as Green and Gold Loop routes approved as part of the Mid Coast Early Action project.

** Option 2 is an alternative to Option 1 that uses demand responsive service.
Outlook for FY 2005 – A Focus on Efficiency

Due to our current budget deficit, we do not anticipate additional FY 2005 operating funds being available to implement the new services identified in this year’s RSIP. In fact, service reductions and adjustments to MTS services may be required to help balance the FY 2005 operating budgets. Therefore, to balance our operating budget and to implement any of the services identified in the FY 2005 RSIP, we must focus on increasing the efficiency of the existing services. The following are strategies that will help to increase our cost efficiency, achieve our operating budget targets, and identify inefficient resources that can be reallocated to implement new services identified in the FY 2005 RSIP. Under SB 1703 (Peace), the Initial Transition Plan states that all transit agencies are guaranteed their FY 2003 base level of revenue service miles and hours. However, should funding constraints require a reduction in service, a new base level of service will be established.

- **Service Reductions and Operational Efficiencies** – Since FY 2003, MTS transit operators have had to reduce services and implement operational efficiencies to help address the current operating budget deficit. This trend is expected to continue for the next few years. In addition, further reduction of ineffective services can free resources to be used to implement more productive services identified in the FY 2005 RSIP. The following general guidelines should be followed when developing future service reductions:
  - Identify the most unproductive services within the transit system\(^{11}\).
  - Reduce unproductive trips and/or reduce overall frequencies on these services while preserving a lifeline level of service (minimum of 60 minute frequencies operating on weekdays).
  - If additional service reductions are required, begin eliminating unproductive trips on more productive services.

- **Eliminate Duplication of Services** - At times, transit routes are developed that duplicate other services. This duplication results in lower efficiency and effectiveness since we are competing with ourselves for the same travel market. Therefore, duplicative services should be eliminated, and the resources from these services should be reinvested in new enhancement opportunities. Current examples of duplicative service include:
  - Routes 980/990 and 860;
  - Routes currently serving the Mission Valley East alignment (existing services will be restructured in conjunction with the opening of this trolley extension in FY 2005 to eliminate duplication of service\(^{12}\)); and
  - Routes currently serving the Sprinter alignment (existing services should be restructured in conjunction with the opening of this service).

- **Specific Operator Performance Improvement Recommendations (PIR)** - As part of SANDAG’s Transportation Development Act (TDA) Performance Improvement Program, each

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\(^{11}\) Rank all transit routes together by passengers per hour, and identify lowest performers based on a threshold to be determined by SANDAG during the annual operating budget development process.

\(^{12}\) The former Metropolitan Transit Development Board has previously approved no net cost recommendations for service restructuring in conjunction with Mission Valley East.
transit operator is required to developing annual recommendations for improving their performance and cost efficiency. A list of the PIRs for FY 2004 implementation is presented in the technical appendix.

MOVING TOWARDS THE REGIONAL TRANSIT VISION

Due to financial constraints, the RTV Mobility 2030 transit network must be implemented in phases. The transit work program outlines SANDAG’s short term efforts to migrate existing services towards the RTV, and mid term efforts to develop new services.

Migrating Existing Services Toward the RTV Concepts

Not only does improving the speed and schedule reliability of existing transit services begin to implement the concepts of the RTV, it has the greatest promise of enhancing service for existing riders as well as attracting new customers. Although many existing services provide a high level of transit access to major recreation and employment centers, they are often slow and unreliable due to traffic congestion and frequency of bus stops. Using transit priority measures and appropriate bus stop planning, slow and unreliable transit services can be enhanced to provide a base level service consistent with the RTV.

Transit First Now! – The Transit First Now! program is designed to identify and develop strategies that will allow existing transit services to bypass congested areas, speed up service, and to make it more reliable. Implementation of these strategies will help to initiate the Regional Transit Vision using existing services to test and evaluate various concepts for broader applications. Transit First Now! strategies include transit priorities and bus stop consolidation.

As mentioned in Chapter 4, priority measures such as signal prioritization, queue jumpers, HOV/managed lanes, freeway shoulder lanes, and exclusive bus lanes allow bus service to maintain high speeds and reliable schedules through heavily congested areas. As part of the Transit First Now! project, we have identified key congestion hot spots that are currently impacting our services, and are evaluating priority strategies to address these congested areas.

In addition to costly priority treatments, SANDAG is evaluating innovative no-cost approaches to improving speed and schedule reliability, including the regional bus stop consolidation program. Since bus stop placement has a significant impact on the speed and reliability of service, proper bus stop location must strike a balance between access and efficiency. Bus stops should provide convenient and easy access to major destinations, at junctions with other routes for transfer opportunities, and in areas with high ridership. Although placing more stops along a route may improve access, too many stops negatively impacts quality of service, travel time, operating costs, productivity, and efficiency. Therefore, bus stops should be strategically placed to maximize access, while the number of stops along a route should be minimized to achieve greater operating speeds, efficiency and quality of service. SANDAG is currently conducting a bus stop consolidation pilot project on Route 11 that will help in developing regional guidelines for bus stop planning.
Develop New Services to Support the RTV

A primary concept of the RTV is an enhanced system of corridor and regional services that act as express overlays to supplement the basic mobility provided by the existing transit service. The RTV also envisions a set of complementary neighborhood circulators that provide feeder services to corridor and regional services as well as internal community circulation. Together, these new services will provide the improvements necessary for transit to provide the level of mobility necessary to support the Regional Comprehensive Plan.

Regional and Corridor Services
To support the Regional Comprehensive Plan (RCP), we must develop transit services that link efficient and “smart” land uses together to provide a competitive alternative to the personal automobile. Based on our market research, competing with the automobile requires an emphasis on speed, flexibility, and the customer’s travel experience. Mobility 2030 outlines a system of enhanced corridor and regional services that complement our existing transit network by providing fast, flexible, and pleasant transportation between urban centers and along major employment, retail, and commercial corridors. These services are designed to attract new rider markets by making transit a “first choice” for many trips.

Currently, two types of express services are provided as part of the region’s transit system. The first type is the Commuter Express services. The purpose of these services is to provide fast and direct service from residential areas to major employment centers. As such, they operate only during weekday peak hours. To increase speeds and provide point-to-point service, few stops, if any, are provided between the origin and destination of the route. Commuter Express services are an important component of the transit system, particularly as people move further away from their jobs, or when distinct urban centers begin to emerge throughout the region under the RCP. However, they are generally expensive to operate, due to low passenger turnover and high mileage, and are provided sparingly, only during the times and days they are most needed. The Interstate 15 express services (Routes 810, 820, 850, 860, and 870) are examples of Commuter Express service.

The second type of express service is the Corridor Express. Unlike Commuter Express routes, these routes act as an express overlay to local service operating along major employment, retail, and commercial corridors with travel destinations distributed evenly along the route. Corridor Express service generally shares bus stops with its complementary local service. However, the stops are limited, but evenly distributed, along the entire length of the route to provide faster service along the corridor. These services operate throughout the day. Routes 30 and 50 are examples of Corridor Express service.

Under the Regional Transit Vision and Mobility 2030, express services will be enhanced to provide the speed, flexibility, level of service, and amenities that are needed to better compete with the private automobile. Through transit priorities and as described in Chapter 4, these services will provide similar, if not faster travel times, compared to driving alone. Advanced technology will improve the customer’s travel experience through amenities such as real time vehicle location, enhanced customer information onboard vehicles and at stations, automated fare collection, and advanced vehicle design. Station enhancements will provide a safer, more attractive, and pleasant waiting environment for our customers. Finally, greater frequency of service operating throughout
the day and week will provide the flexibility to make transit a viable transportation option for San Diegans.

Although SANDAG is developing long range plans for the full RTV network of regional and corridor services, the following mid term Mobility 2030 services currently being developed will be the first applications of the RTV concepts. As these projects are implemented, existing duplicative services should be restructured to provide complementary feeder and collector service, or to address an unmet need.

Showcase Project - This project is designed to showcase the full RTV customer experience that includes new-design vehicles, upgraded stations, transit priority treatments, a close integration of transit into land use planning around stations, level boarding, smart card fare collection, and real time passenger information technology. The Showcase Project is intended to provide an example of, and generate support for, the comprehensive RTV network of services, as well as provide a “laboratory” for testing and learning how to achieve the RTV experience.

The Showcase Project will be operated between San Diego State University and downtown San Diego via El Cajon and Park Boulevards. The service is expected to operate from early morning to late at night, every ten minutes on weekdays and weekends. SANDAG and the City of San Diego are working on a planning and preliminary engineering analysis of the Showcase Project, in addition to preparing an environmental document and an operating plan. The service is expected to be initiated in Summer/Fall 2006.

I-15 Managed Lanes/Bus Rapid Transit (BRT) Project - Caltrans and SANDAG are jointly working to develop the North Interstate15 Managed Lanes/BRT facility between SR 163 and SR 78. This project will include the construction of a four lane, bi-directional managed lane facility in the freeway median that will grant priority access to carpools and BRT services. A series of direct-access ramps will connect the managed lanes to BRT stations located in Mira Mesa, Sabre Springs, Rancho Bernardo, South Escondido, and Downtown Escondido.

This project will provide the capital facilities to operate regional services along the increasingly congested Interstate 15 corridor. The design of the stations will also be enhanced, and automatic fare collection and real time passenger information will be provided. As construction of this project nears completion, SANDAG will work with the region’s transit agencies to develop an operating plan and purchase vehicles to provide fast, reliable, and flexible service along this corridor.

Significant work has been completed for the BRT stations, including completed environmental documents for the three stations at Del Lago/South Escondido, Rancho Bernardo, and Sabre Springs/Penasquitos; reconfiguring the station design at Sabre Springs/Penasquitos to begin preliminary engineering; preliminary engineering on the Del Lago/South Escondido BRT Station; and final engineering on the Rancho Bernardo BRT Station.

Mid Coast Early Action – The Mid Coast Early Action Project will provide enhanced circulation between the University of California, University Towne Centre, and Sorrento Mesa employment sites. This project includes a core distribution service called the Super Loop, which provides

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13 Full project completion anticipated in 2010 with usable segments complete in 2007.
internal circulation within the area, as well as connections to regional services linking the Mid Coast Corridor with other parts of the region. The early action project is part of a large vision to provide additional community circulators that integrate with the Super Loop, point-to-point connector services, and a network of enhanced regional services.

The Mid-Coast Super Loop Project, which includes construction of stations and implementation of priority treatments, is currently in the Request for Qualification process for a consultant to perform Preliminary Engineering and Environmental Documentation.

South Bay Early Action Project – As a result of increased border traffic from Mexico and the rapid growth of South Bay, SANDAG is currently working with Caltrans, local jurisdictions, and developers to implement a South Bay to downtown San Diego BRT project. This service is initially anticipated to extend from downtown San Diego to Eastern Chula Vista with an ultimate connection to the Otay Mesa border crossing. The service will utilize the right of way dedicated along East Palomar Road in Otay Ranch to provide a vital link between the transit oriented residential development and the employment, retail, and entertainment destinations in downtown San Diego.

SANDAG awarded a contract in July 2003 to conduct advanced planning and preliminary engineering. In addition, we are in the process of finalizing a freeway shoulder lane operating plan, and working on identifying on-line (freeway) station locations.

North County Transit First Project – The North County Transit First Project will identify and develop potential BRT services in North County. Proposed BRT corridors include Mission Avenue from Oceanside to Vista, and Escondido to North County Fair via Escondido Boulevard and Bear Valley Parkway. SANDAG will begin this study in FY 2005.

In addition to the corridor and regional services described above, SANDAG and the region’s transit agencies are constructing two new rail lines to extend the network of rail service in the region.

Mission Valley East Trolley Extension – The Mission Valley East trolley extension will close a gap between the existing Blue Line at Mission San Diego and the Orange Line at the Grossmont Transit Center. When completed, this extension will create a light rail loop around the greater San Diego metropolitan area bordered by Interstate 8 to the north, State Route 94 to the south, State Route 125 to the east, and Interstate 5 to the west. Direct service will be provided to San Diego State University, as well as between east county suburban communities and Mission Valley, Old Town, and the coastal communities adjacent to Mission Bay.

This project has been under construction since 2000, and is anticipated to be completed and open for service in mid-2005. The project includes a tunnel and underground station at San Diego State that will serve to provide front door access to the university and adjacent redevelopment projects.

Sprinter Rail Line – The Sprinter rail line will provide fast and reliable service between Oceanside and Escondido along the State Route 78 corridor. Once completed, 15 new stations will be constructed, including a station at Cal State University in San Marcos. The Sprinter is anticipated to relieve the growing congestion along the State Route 78 corridor as well as providing east/west connections to north/south regional services such as the Coaster, Amtrak,
Metrolink, and regional bus service. NCTD is currently procuring construction service to complete the project.

Neighborhood Services

While regional and corridor service provides the backbone to the future transit network, a system of neighborhood circulators must be developed to provide feeder service to and from the regional services. Neighborhood services should also provide convenient community circulation to local and regional trip attractions. The following are services that are currently being developed to enhance neighborhood circulation.

Downtown Circulators – To better coordinate transportation and land use planning, SANDAG and the Centre City Development Corporation (CDCC) are currently conducting a Downtown Comprehensive Transit Study (DCTS) to develop a new transit service and operating strategy for downtown San Diego. This plan will support CCDC’s community plan update. Central to the needs of the project steering committee is better internal circulation that links the various neighborhoods and attractions of downtown San Diego.

Due to limited funding, SANDAG staff has identified several route restructuring concepts that take advantage of existing services to provide enhanced community circulation. These concepts will be further refined to ensure operational viability and consistency with the operating strategy established through the DCTS.

Pacific Beach/Mission Bay Circulator – Pacific Beach and Mission Bay are home to many of San Diego’s finest regional attractions, including Sea World, Belmont Park, Garnet Avenue, and the beach. Convenient connections from Old Town Transit Center to these destinations have been identified as unmet needs through the long range transit development plan for the north bay and beach area. The completion of Mission Valley East trolley extension will also increase transit demand between Pacific Beach, with a large student population, and SDSU via Old Town. Finally, redevelopment activities at the Sports Arena and Midway provide additional opportunities for transit demand. SANDAG is currently developing service concepts to address the transit needs in the north bay and beach area, including a circulator connecting Old Town with the attractions of Pacific Beach.

Nobel Coaster Station Feeder Service – A new Coaster station is currently being constructed at Nobel Road in the University Towne Centre (UTC) area. When completed, this station will provide new opportunities for Coaster passengers accessing destinations in the UTC area, as well as University City residents accessing Coaster destinations in North County. SANDAG will complete a Nobel Coaster station bus feeder study to identify opportunities to provide feeder service to and from the Coaster station with existing as well as proposed new services.

Showcase Project Feeder Service – The Showcase Project will connect two major destinations, SDSU and downtown San Diego, via one of the most transit oriented areas in the region. However, as a regional service, bus stops will be spaced farther apart than for local services, limiting direct access to the route. Therefore, to increase the ridership and productivity on this route, feeder services will be developed as part of a Mid-City bus study to improve transit service in the area.
Marketing and Public Information

An important component of the successful implementation of transit projects to support the RTV will be the execution of branding and marketing programs. The communications and marketing tactics selected will be implemented in stages, and will be directed at progressively larger audiences as projects unfold, effectively increasing awareness and understanding of the program among elected officials, community stakeholders, and the public at large. A specific branding program will help translate the goals of the RTV “customer experience” into vehicle and station designs.

As a complement to the marketing program, we must be effective in disseminating information to the public. We should employ various media that have the greatest impact on capturing the largest audience. Signage at stations and on vehicles should be clear and concise and direct riders to their services as effectively as possible. Finally information on all of our services should be provided in appropriate languages based on the specific service area audience.