# Section Five:
# Building the System - Capital

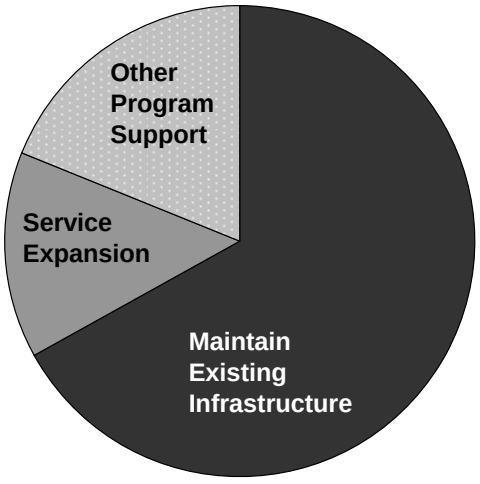
The Transit capital program is integrated with the operating program, providing funds to maintain or expand the system. The level of capital investment is based on projected service levels and the age and maintenance requirements of existing equipment and infrastructure. The strategies outlined in this section provide for the maintenance, expansion and modernization of the transit system and are consistent with the service concept described in Section Three and service strategies described in Section Four.

## Capital Budget Overview

King County Metro's current financial plan defines a capital program for the 10-year period of 2006-2015. Exhibit 5-1 displays the capital program breakdown for the period of the financial plan, and the portion of expenses directed towards maintaining existing infrastructure, accommodating service expansion, and other program costs. The capital strategies in this strategic plan are consistent with the current financial plan, but extend though 2016.

**Exhibit 5-1**
**2007 Budget: Capital Cash Flow by Program, 2006-2015**

| | |
|---|---|
| ADA/Paratransit | 32,000,000 |
| Asset Maintenance | 151,000,000 |
| Business Systems | 600,000 |
| Fleet | 855,500,000 |
| Miscellaneous | 72,000,000 |
| Operating Facilities | 138,000,000 |
| Passenger Facilities | 33,000,000 |
| RapidRide | 59,000,000 |
| Reimbursables | 14,000,000 |
| Speed & Reliability | 22,000,000 |
| Transit Technology Systems | 98,000,000 |
| Trolley | 15,500,000 |
| Vanpool | 55,000,000 |
| Total | $1,545,600,000 |



As shown in Exhibit 5-1, the single highest priority for the capital program is maintaining the existing system infrastructure with 67 percent of the program devoted to this purpose. Support for service expansion activities identified in this plan, including RapidRide, represent 14 percent of the spending over the period. The remaining funding is associated with service expansion, regional partnerships (such as TOD) and other program support.

## Strategy C-1: Maintain, Replace and Upgrade Transit Facilities, Equipment and Systems

> **Maintain, replace, and upgrade current facilities, equipment and systems based on ongoing condition assessments, industry standards and King County policies and procedures.**

Maintaining and upgrading existing capital facilities and infrastructure minimizes total program costs and maintains efficient, safe and reliable operations. Maintenance and upgrades of transit infrastructure are consistent with strategic plan objectives to design and modify services and infrastructure to be more efficient and effective. To this end, specific program elements include:

- Base expansion and modification efforts focused on the design for an expanded Operations Building at the Central Atlantic campus, mechanical and roof renovations at Ryerson Base, as well as improvements to the operator report area.
- Maintenance, replacement and upgrades of aging and outdated transit systems including replacement of the radio system, integration of on-board systems on transit coaches and implementation of an electronic fare collection system.
- Investment in signal priority improvements and real-time information technology.
- Continued investment in the transit assets maintenance program (TAMP), which provides for routine, scheduled replacement of equipment and facility infrastructure such as roofs and HVAC systems.

In addition to the items listed above, the 2007-2016 plan period will see a continued emphasis on coordinating existing and planned service investments with the maintenance, replacement and upgrade of passenger facilities, speed and reliability projects, and other

capital projects as well as an effort to match such investments with the level of cooperation from local jurisdictions.

## Strategy C-2: Passenger Facilities

> **Improve transit passenger facility access, shelter, lighting, bus stop locations and other amenities to enhance the waiting environment. In addition to general improvements throughout the system, focus a portion of resources on RapidRide and Core Service Connection corridors identified in Exhibit 5-2, through cooperation and coordination with local jurisdictions.**

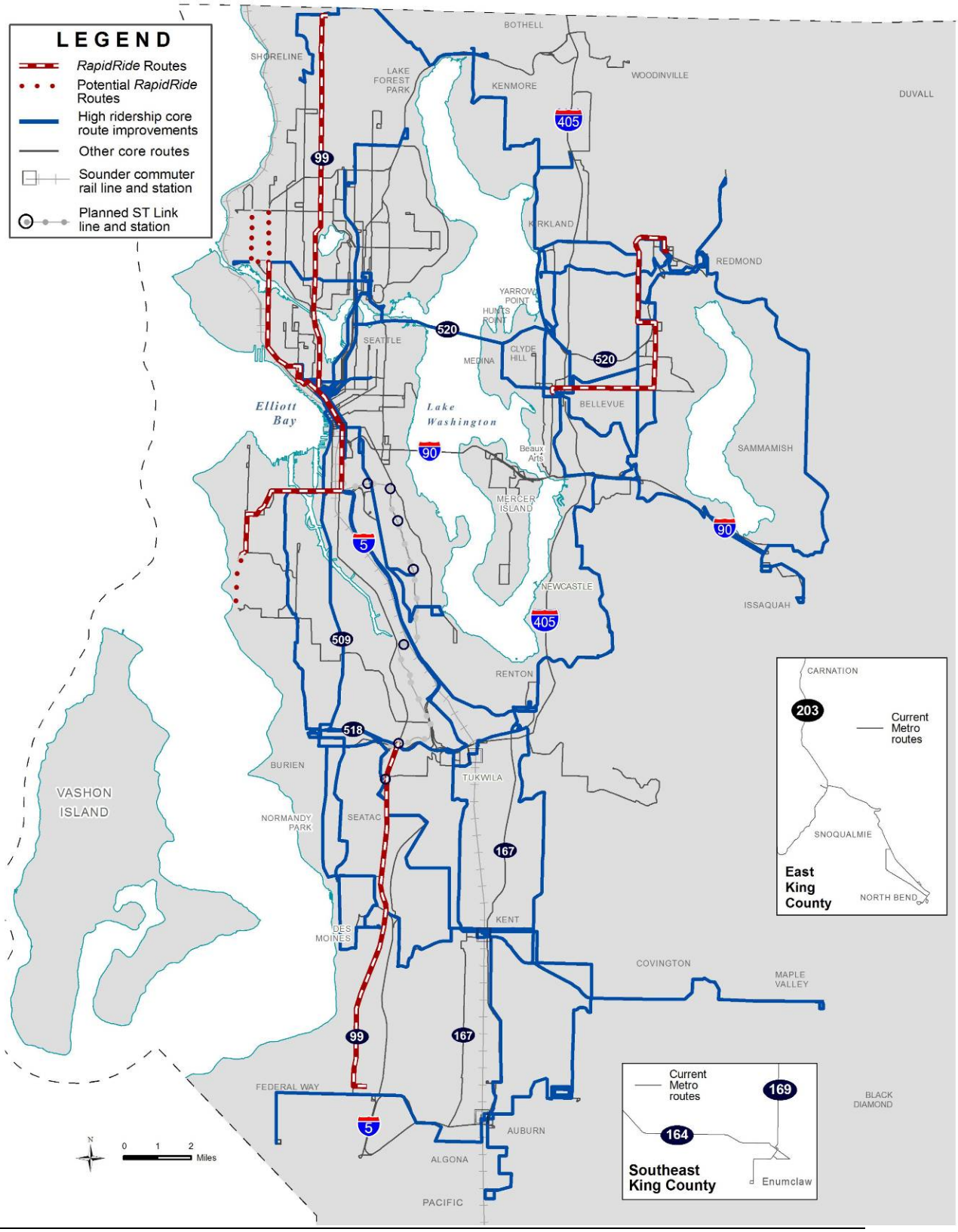
The passage of the *Transit Now* initiative to expand Metro Transit service by 15 to 20 percent over the next 10 years will require a significant number of facility improvements to support the planned service investments. A major focus of transit route and facilities efforts will be to improve passenger facilities on identified RapidRide and other core connection corridors, as well as the continuation of the on-going route facilities program. Passenger facility improvements as part of the RapidRide program include upgraded passenger waiting areas and the installation of real-time bus arrival signs at station locations.

In addition to the RapidRide stations, facilities improvements will be added along the high ridership core connections network shown in Exhibit 4-3. General improvements throughout the system will be focused on a backlog of locations that are eligible for shelters. The 2007 adopted budget provides for expanding the bus shelter program. King County Metro has committed to installing 100 shelters per year to address the backlog of shelter qualifying bus zones. King County Metro will prioritize the current backlog of eligible shelter locations along these core connection corridors so that most, if not all, of these shelters will be installed before the end of 2009.

*Transit Now* also includes funding for the Passenger Accessibility Project. This new program will add the capital improvements needed to facilitate access by current para-transit customers to fixed route services at bus stops along high ridership corridors.

**Exhibit 5-2**

**Focus of Capital Investment in RapidRide and Core Service Connection Corridors**



**Facility Design Considerations**

Design considerations incorporated into transit route facilities include pedestrian and bicycle access, efficient bus ingress and egress, and consistency with neighborhood planning efforts. King County Metro works with local jurisdictions to include transit projects with regularly scheduled maintenance and construction projects to assure transit amenities are built together with these projects, lowering costs and increasing efficiency.

**Bus Stop Improvements.**

Improvements to bus stops are designed to help provide transit customers with an accessible, comfortable and safe place to wait for the bus as well as to address the needs of transit vehicle operations. Locations for improvements are determined by community needs, operational requirements, ridership and service growth. Bus stop improvements include a mix of the following actions or elements:

- **Pedestrian and bicycle access.** Pedestrian access to bus stops will continue to be upgraded to meet or exceed ADA standards; particularly as local jurisdictions make sidewalk improvements. Constructing curb ramps, providing paved waiting areas, and improving sidewalk and pathway connections will improve access. Pedestrian safety issues and provision of bike racks will be addressed in coordination with local jurisdictions' programs.
- **Shelters and benches.** New passenger shelters and benches will be provided at some bus stops as warranted by ridership. Translucent roofs will be installed on existing shelters when they are upgraded and on new shelters to increase customer and operator security.
- **Lighting.** New, improved or re-directed lighting will be installed at selected locations, using solar lighting where feasible, or electric hardwired lighting where agreements are reached for maintenance by the local jurisdiction and utilities.
- **iStops.** Solar powered, customer activated lights and beacons will be installed at bus stops in conjunction with selected service improvement projects, and at other selected locations meeting safety criteria for iStop installation.
- **Signage and customer information.** Transit service routing and levels of usage at bus stops are used to determine the type of customer information or signage that will be included at each bus stop. Regularly maintained and updated information about which routes serve the bus stop, bus departure times, maps and connections to other routes is a critical aspect of operations and customer service.

- **Curb lane transit improvements.** This category generally requires a higher level of investment and also greater cooperation with local jurisdictions. Parking restrictions, extended bus stops, curb changes or bus bulbs, turning improvements and street reconfigurations are designed to improve operations at bus stops. Providing in-lane stops, for example, can help eliminate delays buses encounter when leaving and entering moving traffic.
- **Bus stop spacing.** Stop spacing–the distance between bus stops - has a direct impact on transit operations and rider comfort. Bus stops can be re-spaced, relocated or consolidated to provide smoother, faster, and more comfortable operation and can concentrate ridership to provide for bus stop improvements in a more cost-effective manner. They are pursued when the benefit to a large majority of riders can be demonstrated.
- **Minor park-and-ride lot modifications.** Adjustments to signage, bus layovers, and other minor improvements are often required to accommodate changes in service and park-and-ride utilization.
- **Other improvements.** A variety of other additions may be made at bus stops and shelters, particularly in funding partnership with local jurisdictions and others. Detailed bus schedule information, art, community information, litter receptacles, special benches or other resting and seating structures, railings, and the use of buildings or awnings for weather protection can be included.

### Corridor-based Route Facility Improvements

The existing transit, pedestrian, and passenger facility infrastructure along core network corridors varies significantly. The goal of corridor facility improvement projects is to match the level of infrastructure with existing and targeted levels of transit service. Corridor facility improvements are generally coordinated with corresponding speed and reliability projects in order to maximize combined benefits.

The following factors will be considered in evaluating and advancing corridors for systematic facility improvements.

- Frequent current or planned service
- Active transit signal priority or other speed and reliability project
- Amount of ridership and projected growth
- Local jurisdiction support
- Local funding partnerships
- Potential to reduce delays through bus stop spacing
- Satisfaction of passenger access, safety, comfort and information needs

## Strategy C-3: Speed, Reliability and Safety

**Partner with state and local governments to improve transit operating efficiency, and to create speed, safety, and reliability improvements on important transit corridors. In cooperation with local jurisdictions, focus on the target corridors identified in Exhibit 5-2.**

The primary focus of speed and reliability investments over the next ten years will be on the five RapidRide corridors, and on the network of core service connections shown in Exhibit 5-2. The new RapidRide program aims to provide faster, more reliable service trip times through transit-only, HOV, or business access and transit (BAT) travel lanes, and priority at intersections through transit signal priority and queue jumps.

To date, the Transit Speed and Reliability Program has achieved speed, safety and reliability improvements in a number of important transit corridors. Methods used to achieve program objectives include improved signal coordination, consolidation of stops, queue bypass, customer comfort and safety improvements at and around bus stops, and improved transit access/egress from key locations. Such improvements were completed on both a corridor and spot basis, in coordination with jurisdictions throughout King County. Work was advanced in a number of complex transit corridors and on projects such as transit signal priority requiring significant partnership efforts, technical review and scoping, and technology selection and integration.

Continued investment in these improvements will be needed as traffic congestion on arterials and freeways will continue to pose a major challenge to the efficiency and effectiveness of public transportation services over the next ten years. The Transit Speed, Safety, and Reliability Program will continue to emphasize implementation of relatively low to moderate-cost improvements along arterial corridors with high bus volumes and high ridership.

High traffic volumes slow buses down and lengthen travel times. Variations in daily traffic flows decrease the reliability of bus schedules and result in missed connections. The ability to serve multiple destinations with convenient connections between routes relies on timed transfers and schedule coordination. This reliance increases the importance of on-time performance, particularly where very frequent service is not provided. Where frequent service is provided, improvements that enhance the speed and reliability of bus operations help maintain even intervals between buses thereby reducing overcrowding and schedule adherence problems.

**Types of Improvements: Corridor and Spot-Based**

Two general types of speed and reliability improvements included in this program are:

- **Corridor-based projects** improving high transit volume streets used by bus routes primarily providing core connections and operating frequently. Corridor-based speed and reliability projects support and reinforce the development of a regional system of transit signal priority. These projects are designed to be coordinated with the improvement of passenger facilities along the same corridors, with the intent to provide more pronounced benefits to riders and increases in service efficiency. This approach will be applied to all of five of the RapidRide corridors

- **Spot improvement projects** addressing problems with bus operations at specific locations, such as flow and circulation within or near activity centers and transit hubs. Spot improvements can include queue jumps, transit or HOV lanes, bus bulbs, curb radius modifications, and other forms of re-channelization of the street right-of-way. A series of spot improvements can also improve bus operations along significant route segments.

Significant support from local jurisdictions will be necessary for successful implementation of all speed and reliability projects, many of which rely on modifications to existing city-owned infrastructure such as sidewalks, streets, and curbs. The targeted corridors are served by RapidRide and high-ridership core routes with frequent service, and reflect a continued emphasis on coordinating passenger facilities, speed and reliability, and service investments to provide an improved transit-operating environment. The synergistic nature of coordinated improvements will produce greater overall improvements in comfort, speed, reliability, and convenience along core route connections and throughout the system.

**Responding to a Changing Transportation Environment**

In addition to the RapidRide corridors and the other core connections, additional speed and reliability projects may need to be identified in response to changing conditions or unique opportunities and challenges. Reconstruction of the Alaskan Way Viaduct and other major projects that are under development by other public entities have the potential to significantly impact the quality and cost to operate transit service in this region, generally, and in the Seattle central business district, in particular. Additional mitigation funds are expected to be made available through these mega-projects to design and implement additional transit speed and reliability projects, either as mitigation during the construction period or as longer term solutions to reorient transit service to improve or maintain its performance.

## Strategy C-4: Park-and-Ride Facilities

> **Expand park-and-ride capacity in congested corridors with full or overcrowded park-and-ride facilities. Support development of a series of small owned or leased park and ride lots along low density suburban routes in order to create artificially higher densities to enhance the ridership base. Use the Transit-oriented Development (TOD) program to further expand park-and-ride opportunities through joint use of new parking capacity and financing partnerships. Where these lots have unused capacity, encourage their use by vanpools and park-and-pools.**

The 2002-2007 plan called for extensive park-and-ride expansion, during which nearly 7,000 parking spaces were added to the park-and-ride system. Park-and-ride facilities often function as transit centers, incorporating bus layover areas, route terminals, bicycle

and pedestrian amenities and other transit-operating infrastructure. Expansion projects include infrastructure to support increased levels of use by pedestrians and bicyclists. King County Metro also works with local jurisdictions and the King County Department of Natural Resources and Parks to improve the access to park-and-ride facilities along the pathways to and from the facility. New park-and-ride lots should be readily and safely accessible to pedestrians and bicyclists as well as by motor vehicles. Increased accessibility to non-motorized modes can stimulate greater use of park-and-ride lots without the addition of more parking spaces.

King County Metro constructed or expanded the following park-and-ride lots between 2002 and 2007:

- **Eastgate** – Added approximately 1,000 new spaces.
- **Issaquah Highland**s– Constructed a new park-and-ride lot with approximately 1,000 spaces.
- **I-90 East**– Construction of a joint use parking facility with a minimum of 80 spaces, built by the City of North Bend.
- **Northgate Transit Center** –Added approximately 500 spaces.
- **Redondo Heights** (Pacific Highway S. & S. 272nd St.)– Constructed a new park-and-ride lot with approximately 700 spaces.
- **Kenmore**- Expanded to add approximately 200 spaces.

In addition, 11 new park-and-ride lots were leased and 1 existing leased lot was expanded to create higher densities and expand the ridership base in low-density suburban areas.

Sound Transit constructed additional lots with funding partners including King County Metro:

- **Federal Way Transit Center**– A new park-and-ride with approximately 1200 parking spaces.
- **Overlake Transit Center** at NE 40th Street– A new transit center with approximately 200 parking spaces.
- **South Sammamish Park-and-Ride Lot**– A new park-and-ride with approximately 265 parking spaces.
- **Auburn Station**– A new rail station/transit center with approximately 600 parking spaces.

- **Kent Station**– A new rail station/transit center with approximately 1100 parking spaces.
- **Tukwila Station**– A new rail station/transit center with approximately 200 parking spaces.

Sound Transit also constructed direct access ramps at the following locations, allowing buses to enter and exit HOV lanes from park-and-ride lots without weaving across general purpose travel lanes:

- **Federal Way** at I-5 and South 317th Street
- **Eastgate** at I-90 and 142nd Avenue Southeast
- **Totem Lake** I-405 and Northeast 128th Street

Over the next ten years, King County Metro will place less emphasis on major park-and-ride expansion projects. King County Metro plans only to expand the Brickyard Park-and-Ride by 100-200 spaces, and to expand the South Kirkland park-and-ride by 250 spaces if funds are received through the federal Urban Partnership program. King County Metro will continue to support projects of other agencies and will participate in joint studies of park-and-ride demand for future development plans.

**Planned Park-and-Ride Lots**

Sound Transit and the Washington State Department of Transportation (WSDOT) are the main agencies responsible for major park-and-ride and access ramp projects. Below is a list of the major projects identified for implementation over the next ten years.

- **Mercer Island Park-and-Ride**- Redevelop the existing park-and-ride lot with structured parking that will double the existing number of parking spaces for a total of approximately 450. Opening Fall 2007.
- **Issaquah Transit Center**- Redevelop the existing park-and-ride lot with structured parking. The total number of parking spaces will be approximately 820. Opening Spring 2008.

## Strategy C-5: Replacement and Expansion of the Transit Fleet

**Replace and expand the transit bus fleet so that the size, fleet mix and fleet age are consistent with service projections and operating characteristics of the regular bus system. Replace and expand Vanpool fleet to maintain the appropriate mix of vehicle sizes to encourage and support vanpool program participants. Replace and expand Access paratransit vehicles to support efficient operations. Achieve more efficient and energy-friendly operations with features including efficient propulsion systems and non-traditional fuels.**

### Fleet Procurement and Operating Facilities

The type and quantity of vehicles purchased and maintained by King County Metro is based on current and projected service levels. Service expansion drives fleet expansion plans, which in turn define the extent of the need for expanded base capacity.

During the period of the financial plan, more than 75 percent of the existing Transit fleet will be replaced as individual fleets reach the end of their useful lives. This replacement represents a significant financial commitment. For the 2006-2015 financial plan period, fleet replacement represents 44 percent of the capital program.

### Projected Transit Fleet Requirements

The year 2016 network described in this plan would require about a fifteen percent increase in the total size of the King County Metro transit fleet, from 1,315 vehicles in 2007 to 1,505 vehicles in 2016. These totals reflect the projected peak coach requirements for Metro Transit service with appropriate spares and does not include DART, Paratransit, Vanpool, or Sound Transit vehicles operated by King County Metro. This number also excludes additional coaches that could be funded through the federal Urban Partnership program, or by the Regional Transportation Investment District (RTID) to mitigate the traffic impacts of freeway construction.

The number of coaches included in each procurement will be sized to meet the service network described in this plan and modified by the most current service projections available. Noteworthy changes in fleet during the 2007 to 2016 timeframe include:

- **More Diesel Electric Hybrids.** King County Metro will add a total of 122 more diesel-electric hybrid articulated coaches. "Hybrids" have demonstrated a savings in fuel over comparable diesels. On top of reduced fuel usage and $CO_2$ emissions,

hybrids have also performed well on the road, and provided a solution to operating in the Downtown Seattle Transit Tunnel with Link light rail. In combination with the use of trolley fleets and biodiesel fuel, King County Metro will continue to operate one of the cleanest fleets in the nation.

- **RapidRide branded coaches to launch in 2010**. Of the 122 diesel-electric coaches, 100 will be used to implement RapidRide service. RapidRide coaches will be designed to be in sync with the latest in BRT amenities and features. All RapidRide coaches will be articulated, low floor, 3 door, diesel-electric hybrids. Coaches will be designed to allow all-door boarding and de-boarding. Coaches will have a unique "look" to distinguish them from other transit service. Additional electronic signage both on the exterior and interior is a likely added feature on the bus. Changes to seating areas, WiFi, and security cameras are also being considered for this service.
- **Replacement of the major 40' and 60' diesel fleets.** The largest diesel fleets in King County Metro (272 60' coaches and 395 40' coaches) will come to the end of their useful life in the 2010 to 2012 timeframe. This means that about half of Metro Transit buses will be replaced with modern low floor motor coaches in this timeframe. Because low floor coaches provide slightly fewer seats, there will be an adjustment made in procurements to buy more articulated coaches to provide additional seating on the margins where crowded trips on 40' coaches will now be accommodated with 60' bus service.
- **Replacement of the trolley bus fleets.** In the 2014 to 2016 timeframe, King County Metro will continue its commitment to the electric trolley bus system by replacing its entire trolley fleet with a new generation of electric buses. King County Metro remains one of only a handful of transit agencies in North America who have continued to operate this unique type of bus service. Trolley bus service provides service to about 20 percent of King County Metro's riders despite amounting to just over 10 percent of the bus fleet.

### Projected ADA Paratransit Fleet Requirements

Rider demand, average trip length and the productivity of paratransit service affect fleet requirements for paratransit service. Demand for ADA Paratransit service is projected to increase steadily over the next ten years, due in part to providing new service under *Transit Now* to suburban areas of the county that are not currently served. Another factor affecting demand is the aging of the population, which will become a factor reflected in

ridership projections in 2011. It is projected that the fleet necessary to support the ADA Paratransit Program will increase from the present level of 291 vehicles to 407 by 2015.

**Projected Vanpool Fleet Requirements**

The current capital program for the vanpool fleet is projected to grow at an average rate of 80 vans per year, including assumptions for expanded growth due to the *Transit Now* initiative. During the plan period approximately 628 expansion vans will be purchased to serve over 6,100 new vanpool riders.

Replacement van purchases during the plan period represent a significant investment in the program. Replacement vans are purchased when vans have reached the end of their defined useful economic life and must be retired from active service with vanpool groups. 1,553 vans are scheduled for replacement from 2008 through 2016. In 2000, the replacement cycle for program vehicles was increased from five to six years. Eight, twelve and fifteen-passenger vans are scheduled for replacement.

King County adopted policy requires that Vanpool Program passenger fares and the resale of vans recover: 100 percent of capital costs, 100 percent of direct operating expense and 25 percent of administrative costs. Some adjustment of this target subsidy level can be considered if such a change enables simplification of fares or is used in conjunction with efforts to expand vanpool use.

## Strategy C-6: Operating Base Expansion

> **Expand transit operating base capacity at Central, Atlantic and Ryerson bases as described in the adopted financial plan to support projected transit fleet growth. Continue to examine fleet requirements in response to evolving service needs and commitments, including potential freeway construction mitigation service.**

King County Metro will continue to work to complete base expansion activities at Central-Atlantic campus and continually evaluate additional base capacity needs. King County Metro's most recent "Transit Base Expansion Plan" in December 2002 indicated that projects to expand capacity at King County Metro's central base facilities (Atlantic, Central and Ryerson) will provide adequate capacity to meet King County Metro service needs until the 2020-2030 period, assuming that Sound Transit provides new base capacity for ST Regional Express service by 2013.

If additional base capacity becomes necessary due to a greater service requirement, such as a significant transit service to mitigate regional freeway construction projects, King County Metro will examine additional base expansion options in South King County. Metro Transit bus service that operates in South King County is projected to grow the most beyond its current base capacity in the next 10-15 years. Currently all South King County base capacity is located at "South Base" in Tukwila.

Bases are located to minimize "deadhead" travel time (time spent traveling between the base and the start or end of revenue service), which is the biggest cost factor in determining base location, including other factors such as variations in land or development costs. King County Metro's fleet of coaches is sized to handle peak service demands. Bus bases are built to accommodate the peak number of coaches. Buses are assigned to bases to minimize overall system deadhead costs.

Currently, King County operates about 115 coaches for Sound Transit, which represents over half of the capacity of a typical Metro transit base. The ST fleet operated by King County Metro continues to grow incrementally. If the roads and transit program is approved, Sound Transit will construct new bases for Regional Express service, and the capacity Sound Transit currently uses at Metro Transit bases will become available for expanded Metro Transit services, including for construction mitigation. If ST2 does not pass, King County Metro will need to work with Sound Transit to secure adequate base capacity for its fleet.

## Strategy C-7: Terminals & Layover

**Work with local jurisdictions to secure long-term agreements for use of on-street layover spaces. Coordinate with other transportation agencies and private developers to incorporate layover space and turnaround facilities into transit stations, transit centers, transportation projects and new development proposals where needed to support or improve current transit service. Consider off-street facilities for layover when on-street layover capacity is not available, and when dedicated layover space would result in significant operating savings, improved routing and/or operator safety.**

Layover space - parking near the end of a route for buses waiting to begin a trip - is critical to efficient system operation and is necessary to enable increases in service levels. Layover space, especially on-street layover is increasingly difficult to establish however. King County Metro relies on curb space designated by local jurisdictions for most of its layover needs. The participation of local jurisdictions in providing layover space is essential to provide for more efficient operation of service and is necessary to enable increases in service levels. Urban development, changes in service, and local jurisdiction decisions to prioritize non-transit traffic can trigger the need to site new or improved existing layover locations. As layover space becomes harder to expand or maintain, the active identification and development of off-street layover space will become more critical as will the support and participation of local jurisdictions.

The following off-street layovers were developed during the 2002-2007 planning period:

- Atlantic/Central Base
- Bear Creek Park-and-Ride
- Aurora Village Transit Center
- Kenmore Park-and-Ride

It is likely that additional off-street layover will be required during the 2007-2016 time period as on-street spaces become more difficult to obtain or retain. This is especially true in the downtown Seattle area, but may also be true in other activity centers, as well as in neighborhood locations at the end of Metro Transit routes.

Requirements for off-street layover will be considered further in the 2008 update to this strategic plan. The following off-street layover locations have already been identified for implementation between 2007-2016:

- Redmond Park-and-Ride
- Eastgate Park-and-Ride
- Burien Transit Center
- Bellevue CBD

## Strategy C-8: Transit-Oriented Development

**Encourage and support transit-oriented development at or near transit facilities to increase transit ridership by increasing activity and density in centers, and by increasing affordable housing and an appropriate mix of other land uses. Reduce transit facility development costs through joint development and/or public-private partnerships.**

**For the purpose of establishing benchmarks by which to later measure the impacts of a project, estimate the anticipated benefits of each proposed TOD including:**

- **expected ridership increase attributable to the project**
- **existing and potential residential and office density**
  - **within the project, and**
  - **within a reasonable walking distance of the transit facility**
- **amount of affordable housing**
- **amount of retail that supports nearby resident and transit user needs**
- **design elements that facilitate transit operations**
- **design elements that promote walking and bicycling**
- **partner participation**
  - **city**
  - **developer**
  - **other transit agencies**
- **project contribution to reduced greenhouse gas emissions**

**Assess the extent to which each existing TOD, and future projects two and five years after completion, provide the anticipated benefits and other project specific benefits related to transit operating or facilities enhancements, local jurisdictional goals and other transportation goals identified in this plan.**

### Transit-Oriented Development (TOD) Program

Transit-Oriented Development projects bring increased residential and commercial density and activity together to improve urban areas that already support high levels of transit service. The King County TOD program is intended to increase transit ridership and to meet larger growth management goals by working with jurisdictions to develop transit-supportive land uses and activities and encourage concentration of growth in centers. This concentration of growth offers alternatives to suburban sprawl, conserves natural resource lands, keeps existing city and town centers vital and allows transportation to operate more efficiently.

Through partnerships with jurisdictions and developers, the TOD program creates opportunities to leverage funding, enable transit facility improvements and increase transit ridership while increasing development of housing, jobs and other activities in close proximity to major transit facilities.

As a result of the TOD program, projects that have been completed or are in process include transit centers, park-and-ride lots, off-street bus-layover, and residential, institutional, retail, office, hotel and entertainment facilities. The TOD program also generates revenue for King County through the sale of property and acquiring TOD-specific grants.

All proposed TOD projects undergo cost/benefit analyses. The concept of "Net Transit Benefit" is the basis used to evaluate projects.

Transit benefits fall into three major categories:

- **Ridership** increases due to housing and/or additional park-and-ride stalls;
- **Facilities** upgrades such as transit center improvements and added bus layover;
- **Revenues** from sales taxes and sales of underutilized surface park-and-ride lots.

Since the inception of the program, the completed projects include:

- **Northgate North Retail Project:** Opened in 2000. Touchstone Corporation provided 60 replacement park-and-ride spaces in its parking structure until the park-and-ride lot at 5$^{th}$ and NE 112th is relocated.
- **Metropolitan Plan – Renton:** affordable housing and park-and-ride stalls: Opened in 2001. 150 park-and-ride stall were added, 30 of which are shared with residents in 90-unit mixed-use development constructed about park-and-ride. Each unit supplied with free bus pass for 10 years from opening.

- **The Village at Overlake**: Opened in 2001. 308 Apartments, day care and shared parking structure.
- **Olson-Myers Park-and-Ride in Seattle**: Underutilized park-and-ride lot sold to Apprenticeship Training Trust for job training facility. Now being resold for construction of 450 affordable senior housing apartments.
- **Kenmore/Northshore Park-and-Ride**: Sold to City in 2004 for construction of 100 affordable units in 2011. Sale funded 200 additional stalls and layover construction at nearby Kenmore lot. Utilization of expanded lot is now over 90 percent.
- **Kent Sound Transit Garage**: King County paid $2.1 million in 2000 for 191 replacement stalls in Sound Transit commuter rail garage in downtown Kent. Allowed DOT to surplus James Street lot now valued at $3.2 million.
- **Northgate Simon & Lorig Development**: Simon lease of 280 stalls for 20 years. Lorig lease of 350 stalls for $4.3 million. Sale of lot at 5th and 112th to City of Seattle for $9.5 million. Both leases and sale approved by County Council in May 2006.
- **Redmond Downtown Park-and-Ride**: Larger portion sold to Trammel Crow Residential in 2006. Approximately 300 condo/rental units, up to 20 percent affordable at 80 percent of median income. 400 park-and-ride stalls are to be reoriented in county-built garage on smaller, retained portion of site. Construction of new transit center, garage, and housing set for completion in 2008.

In addition, there are several projects currently being evaluated for TOD feasibility:

- **Northgate Transit Center East P&R –** Five hundred **(**500) stall Metro surface park-and-ride, 170,000 square feet of developable property east of existing transit center. Market studies indicate potential for housing and shared use parking. Seattle Housing Authority and other developers have indicated interest in building mid-rise affordable housing on this surface lot.

- **South Kirkland** (Bellevue/Kirkland) – County-owned, 6.95 acres, 603 parking stalls. Site has potential for large-scale residential and/or mixed use. Excellent access to adjacent freeways and potential future Burlington Northern Santa Fe trail. Site is bisected by boundary between Bellevue and Kirkland.

- **Auburn** – City and county have issued RFP for downtown mixed-use developer. Once developer is selected, County would enter into negotiations to buy park-and-ride stalls in mixed-use facility. Nearby lot on 15th Street near airport would be sold by county to pay for downtown replacement stalls.

- **Burien –** Studies indicate there is a market for mixed-use TOD in downtown. Redevelopment would include structured replacement parking at the existing Burien park-and-ride. Part of the public investment to date includes new $8 million downtown transit center to be completed in 2008. Four hundred thousand dollar ($400,000) federal grant is currently being used by county to issue a request for qualifications to determine short list of interested developers.

- **White Center** – Interest has been expressed from the County Executive in moving park-and-ride from 1.5-acre Olson/Myers lot (100 stalls) to downtown White Center location as part of mixed-use facility. TOD staff have directed consultants to conduct market and design analysis to determine if interested downtown property owner can accommodate TOD/Transit facility.