

System Retrofits

SACRAMENTO REGION

MTP2035
METROPOLITAN TRANSPORTATION PLAN
THE NEXT STEP IN BLUEPRINT

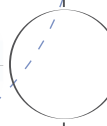
ISSUE BRIEF

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System retrofits improve the existing transportation system by adding new technology, increasing accessibility, correcting unsafe conditions, enhancing multi-modal routes, and meeting the desires of a community. The MTP2035 must consider:

- How retrofit priorities compare with maintenance, operations or expansion priorities?
- What consequences phased-in retrofits bring?
- How do retrofits fit into a Blueprint-based transportation plan?

This brief highlights the system retrofits issues being studied for the MTP2035. For the complete System Retrofits Issue Paper visit www.sacog.org/mtp/2035



Intelligent Transportation Systems (ITS)

ITS uses technology to improve traffic flow, transit operations, incident management, emergency response, and traveler information. Common applications include roadway cameras, automated message signs, traffic signal upgrades, and transit signal preemption. Smart corridor improvements cost \$600,000 to \$1 million per mile, less than a quarter the cost of adding new lanes.

The 2005 ITS Strategic Deployment Plan centralizes and coordinates traffic monitoring and operations throughout the region and identifies corridors where local agencies are planning near-term ITS strategies, but funding for full implementation still must be found.

Soundwalls

Residents adjacent to freeways, arterials and railroads have frequently requested soundwalls to protect them from noise. Soundwalls are the most common approach, but special pavements, berms and landscaping can be used in some cases. Caltrans soundwalls average \$1.3 million per mile to construct. There is no existing funding program for retrofit soundwalls, and the State has devolved its responsibility to regional agencies.



Americans with Disabilities Act (ADA) Compliance

The Americans with Disabilities Act affirms the civil right of disabled access to the transportation system, but the significant costs mean that retrofit of existing facilities must be phased in over time. Comprehensive pedestrian improvements to a major street intersection are expensive, averaging \$250,000 per intersection to provide accessible pedestrian signals, ramps, improved lighting and special paving material for the crosswalks. The total regional cost of compliance is not known, but Sacramento County estimated that it would cost \$67 million for the unincorporated areas.

Bike Lane and Sidewalk Connectivity

The Blueprint intends a larger bike lane and sidewalk network, to serve increased travel by bicycle and walking. The last MTP included \$350 million over the next 20 years for bicycle and pedestrian facilities. SACOG has recently completed the *Regional Bicycle, Pedestrian and Trails Master Plan* containing a list of almost 300 projects, of which 126 are considered high priority and ready to implement. SACOG's current regional funding programs provide less than \$10 million every two years to local agencies for these purposes.

Street Improvements

Techniques to improve street safety and aesthetics are popular, but must compete for funding with transportation improvements. Major street safety enhancements include turn lanes at intersections, improved lighting and signage, special paving and median strips. Streetscaping includes landscaped buffers between streets and sidewalks, landscaped median islands, lighting, signage, tree planting and street furniture. Streetscaping can cost as much as \$3 million per mile, with ongoing landscaping maintenance as a continuing cost.

Local Bridges and Rail System Upgrades

Many bridges and railroad/road intersections in our region are old and need to be replaced, reconstructed or widened. Caltrans has identified 218 local bridges in need of retrofit. The federal highway bridge replacement program could cover part



of the \$130 million cost, but match funding is a challenge for many local agencies. Regional funds are available for very high priority local bridges. Caltrans also maintains a list of unprotected railroad/road intersections, but very little federal or state money has been available for these projects; a new federal safety program provides funding that can be used for this kind of work starting in 2007.

The city of Sacramento has begun improvements to its downtown rail (intermodal) station, to connect Bay Area rail service, commuter and local buses, and light rail trains in a more comfortable, convenient and usable setting. The \$350 million project includes new track alignments, relocation and renovation of the old depot, a parking garage, new freeway ramps, and other improvements.

Storm Drainage

Drainage systems and water treatment facilities on freeways and state highways in rural areas will need \$15 million in improvements to comply with federal and state water quality standards. The same requirements have not yet been imposed for drains on local streets, where the cost would come to more than \$50 million. The costs to treat all runoff in urban areas are more complicated and undefined, but road programs would have to be involved.

Other Retrofits

There are other types of retrofits that could have significant costs, including: freeway landscaping and lighting, paving highway and freeway shoulders, cul-de-sac pass-throughs, and pedestrian-bicycle crossings at freeways, rivers, creeks and railroads. Very few retrofits have any dedicated funding sources available—to fund them, the region will have to consider them in competition for regional discretionary funding.



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