

## **BOUNTIFUL CITY - SIDEWALK IMPROVEMENT PROGRAM**

Any Public Works professionals can tell you, residents are passionate about their sidewalks. The physical condition of sidewalks can have a large impact on the quality of life in a city. It's a big factor in whether children walk or ride bikes to school instead of going by car. It impacts pedestrian traffic for businesses in downtown and historical districts. Various studies show that the lack of sidewalks and/or poor quality of sidewalks is directly related to peoples' reliance on the automobile, which directly affects parking requirements, traffic congestion, people's health, and the environment. Providing and maintaining sidewalks makes a community safer and improves its assets.

These are not the only reasons to maintain the sidewalk however. The Americans With Disabilities Act (ADA), a major civil rights law prohibiting discrimination on the basis of disability, demands that cities provide and maintain safe surfaces and access for people who are disabled, correcting sidewalk panels that exhibit a change in level. And even among the "able," there is a substantial list of trip and fall liability claims against municipalities every year. The change in level between panels causes a "trip hazard."

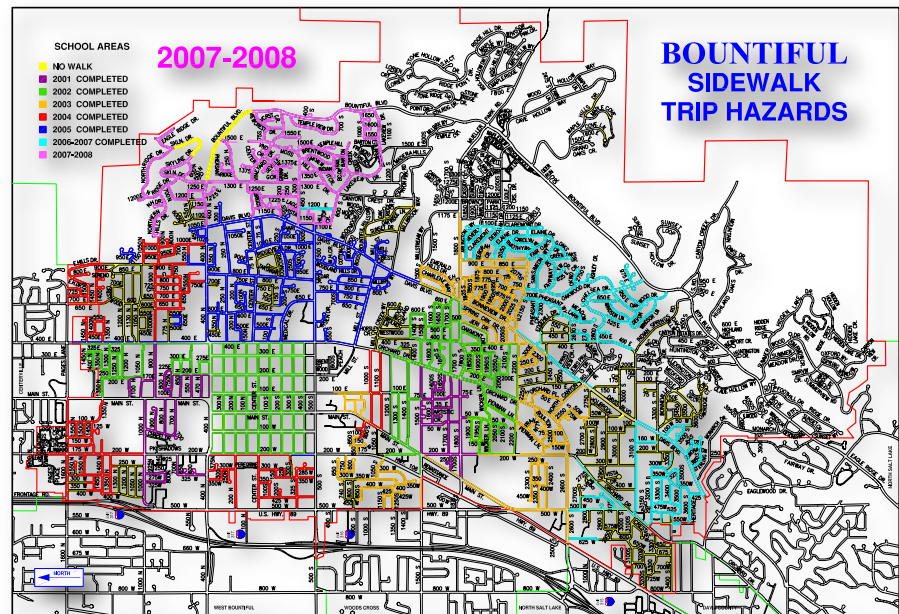
Many Utah municipalities are proactive in their approach towards sidewalk maintenance. One city, deserves particular mention however, because of its strong commitment to a comprehensive, and systematic dedication to the process they implemented to make their sidewalks safer and compliant with the ADA.

In 2001, the City of Bountiful faced an insurmountable backlog of raised or cracked sidewalks that needed repair. The city was removing and replacing the damaged panels and exploring other techniques to potentially stretch the budget. Removing and replacing all panels was simply not a viable option due to the cost and desire to keep tax burdens to residents at a reasonable level. During the exploration for new techniques, the city's Department of Public Works came across a unique patented process that was first engineered in Utah (owned by Precision Concrete Cutting). The city evaluated the new technique in their city for speed, safety, aesthetic result, completeness of correction, protection to landscaping, intrusiveness to residents, and cost.



The project is now in its eighth year and has successfully completed the majority of the city. In fact, within the next two years, the entire city will have been evaluated and repaired. It is estimated that the solution that the city now uses can remedy over 95% of the current ADA problem areas. In addition, the city has significantly reduced the likelihood of trip and fall accidents on their sidewalks. The enclosed map shows the areas of the city that were completed through last year.

One of the most rewarding positive aspects of the project is the response from the city's residents. The city has received a number of calls of appreciation for the work that has been provided and has had requests for other areas to be completed. The following sections illustrate other particular benefits that the city has been able to take advantage of in implementing this program:



1. Cost Savings - the average price for a sidewalk panel to be removed and replaced include the cost of demolition, removal of materials, preparing forms and grade, mixing and delivering concrete, sculpting the panel, and protecting it during the curing process. The savings over removing and replacing the panel is estimated at \$625K. During the 2007/2008 budget year the city will spend \$125,000 vs. an \$750,000 that would have been required to remove and replace the same number of panels. Since the inception of the program, the savings to tax payers is in the multiple millions of dollars. (details and methodology provided upon request)
2. Survey - preparing a survey designed to evaluate the current status of the sidewalk panels only opens the city to more liability. Evaluating and correcting the concurrently protects the city from arguments of negligence and neglect. The project is designed to both evaluate the sidewalk assets, survey the affected panels, record data, and remove the hazard all at the same time. The city receives data on the work that is completed and additionally receives information on any sidewalk panels that are beyond specifications for the contract.

3. Resident Disruption - less tangible than the cost data, the amount of residential disruption is also significant. Removing and replacing the panels often bleeds into multiple days when large stretches of concrete are to be repaired. Using Bountiful City's current program, each repair generally takes 8 - 10 minutes and the equipment operator is on to the next problematic panel. In addition, the method used does not damage landscape like removing and replacing the panel would. Also, the equipment doesn't cause the sidewalk to be out of service.
4. "Green" Solution - the city's program creates only a small fraction of the overall waste that would be required to remove and replace the panel. In addition, the service provider recycles all concrete to be re-used in other applications.

Bountiful's Public Works Department should be commended on the long-term evaluation of its sidewalk asset maintenance program. The program is fast, improves safety in the community, and leaves the sidewalk looking clean and attractive; while increasing the public trust by putting together a program to best use tax-payer dollars.