City of Bellevue

MEMORANDUM

TO: **BELLEVUE TRANSPORTATION COMMISSION**

FROM: **FRANZ LOEWENHERZ, SENIOR PLANNER**

SUBJECT: **AMERICANS WITH DISABILITIES ACT (ADA) SIDEWALK & CURB RAMP SURVEY**

DATE: **JULY 12, 2007**

This memo is provided to update the Transportation Commission on the City's compliance status with respect to the Americans with Disabilities Act (ADA) requirement for local governments to identify existing sidewalk and ramp facilities that limit access for persons with disabilities. Staff will be joined by Dr. James Mekemson, of the FHWA, and share with the Commission an innovative strategy to accomplish the ADA sidewalk and ramp facility survey this summer. *No action is necessary at this time.*

In considering how to approach the ADA sidewalk and ramp facilities assessment, Transportation Department staff contacted jurisdictions across the country to gain insight into effective approaches to data collection. To date, few jurisdictions in the country have fully complied with this mandate, due in part to the high cost of conducting an inventory of existing pedestrian facilities. Based on this initial assessment, it was determined that *the task of collecting ADA sidewalk and ramp feature data along Bellevue's 336 sidewalk miles could cost anywhere from $100K for a limited assessment to more than $1M for a detailed survey.*

As follow-up to this review, Bellevue staff explored emerging technologies that could cost-effectively provide the city a high degree of data accuracy. This next stage of research led staff to a promising technology under development at the Office of Pavement Technology, Federal Highway Administration (FHWA) in Washington, D.C. At that time, the FHWA office was testing an ultra-light, slow-speed inertial profiler (ULIP) mounted on a Segway Human Transporter. The device operates at about 10 mph and performs laser measurements of pavement surfaces; while an attached on-board computer collects the data. The technology had initially been used to measure surface defects on highway and airport pavement surfaces.

Bellevue staff proposed that FHWA undertake a test of the ULIP device to collect ADA sidewalk and ramp facility data in Bellevue. FHWA agreed to fabricate the ULIP (at an estimated cost of $120,000), and the device is being loaned to Bellevue at no cost to the city. The sole requirement on the city for participating in this test of the ULIP is submitting a research paper to the Transportation Research Board's 88th Annual Meeting. The paper would assess the performance of the ULIP in conducting grade, cross-slope, and slab-to-slab faulting inventory assessments of pedestrian facilities. If the ULIP

proves to be an accurate and deployable technology for the measurement of critical pedestrian facilities, more jurisdictions will be able to fully comply with ADA requirements.

On July 11th, the city will take receipt of the ULIP. Dr. James Mekemson, of the FHWA team that fabricated the device for the City of Bellevue, will be at city hall for three days (July 11, 12, 13) to review the user manual and documentation and to troubleshoot the interface of the data generated from this device with the city's Geographic Information System. The Transportation Department will have two of its interns operating the ULIP on Bellevue's sidewalks during the months of July, August, and September, under the supervision of Senior Planner Franz Loewenherz, the overall manager of the inventory effort, and the primary contact with FHWA on this project. The city's Risk and Legal Departments have reviewed the terms of this project and approved the effort within identified parameters, which the project team will implement.

The data from the field inventory will be compiled and analyzed over the next several months. The results of this work effort will be an important component of the City's overall ADA Transition Plan; it will also be important in ensuring that ADA mobility interests are adequately incorporated into the update of the City's Pedestrian and Bicycle Plan, and ultimately into the City's non-motorized investment strategy.

Please contact Franz Loewenherz at 452-4077 with any specific questions about the ULIP device or the data collection work effort.