



## City of Seattle Automates Paper Forms, Decreasing Processing Time and Costs

The Fleets and Facilities Department of the City of Seattle is responsible for managing 105 buildings, including such critical city service providers as Health Centers, Police Stations, and Fire Houses. The department's specialized teams have a range of expertise including: plumbing, paint, carpentry, heating, and ventilation. To keep these facilities maintained, they conduct routine inspections and manage repairs totaling 10,000 to 11,000 work orders per year.

### Challenge

Managing all the workflows – from work orders to time sheets – has traditionally been conducted on paper. A work order would be sent to the maintenance department and a scheduler would assign it to a specific worker as an upcoming job. Once the repair is completed, the order is documented and closed. The paper trail creates bottlenecks and management challenges. When paper documents are lost – work orders remain open – leading to duplicate work or surprises on site. Writing the data on paper for these highly mobile workers was easy. Reliably accessing the digital data was difficult.

To speed up data capture and improve operational visibility, the Fleets and Facilities Department has been planning to go all digital. The plan is to have work orders and timesheets tracked on the intranet in a unified network with the city. Many sedentary workers will manage timesheets and work orders through net books or PCs.

In scenarios such as building inspection and maintenance, mobile computers are often impractical because of weight, fragility, limited battery life, and harsh environments. Since one-fourth of the Fleets and Facilities staff regularly conducts such highly mobile inspections and maintenances, the team began researching digital data capture alternatives to mobile PCs.

### Solution: Capturx Forms for Excel

The City of Seattle is exploring Capturx Forms for Excel with digital pens as an alternative to net books for documenting building inspections, maintenance, and time sheets for many of their most mobile workers. Capturx will be used with the same daily timesheet form that they've

### Summary

**Customer:** City of Seattle, Fleets and Facilities Department

**Challenge:** Field data collected on paper timesheets, work orders, and inspection forms difficult to manage. Manual data entry causes bottlenecks for data sharing and archiving.

**Solution:** Capturx Forms for Excel digitizes data as it's written and integrates into Microsoft Excel for immediate sharing, reporting, and workflow automation.

**Results:** Capturx speeds up data management by eliminating manual data entry. Simple digital pen and paper is a natural fit for mobile data collection.

***“Our mobile workers have not had ANY problems in the field.***

***No training necessary. Capturx doesn't interrupt our everyday workflow.”***

STEVEN VANDERVEER  
Facilities Analyst  
City of Seattle

been using for years, printed on normal paper using one of the City's office printers.

The forms are printed from Excel using the Capturx add-in, which creates a unique digital watermark enabling the form to be read by the digital pen. In the field, teams simply record their name, employee ID, file timesheet number, work order number, regular or overtime, and the number of hours worked. The digital pen creates a normal ink record of the data collected on paper while also making a digital copy which it stores on the pen's memory.

Each stroke of the pen on the paper form creates new digitized data. When the pen is docked into its USB port on a PC or laptop, the field data is automatically integrated into Excel, SharePoint, or any other back-end system. There is no new technology to learn or data to re-enter.

## Benefits

### **Saving time by eliminating data entry**

After a day of work the digital pen is given to office staff, who can now simply dock the pen to extract data without any redundant data entry. What used to take a few minutes of data entry per timesheet is now done in seconds. With 1 timesheet per day per person, City of Seattle could save 320 hours of data entry per year, that's 8 weeks of time freed up for other tasks.

### **Easy data access**

Capturx creates structured data that can be integrated into field service databases and rich PDF images with both the original handwriting and converted text as keywords. The standard-based data types can be easily searched through Office and file systems – or easily integrated into other back-end systems for automated workflows.

### **Work the way they work**

Capturx automates the inspection and maintenance workflow without changing the simple and reliable paper-based process for mobile workers. Digital pen and paper fits the highly mobile building inspection and maintenance workflow well. The pen is durable and easy to carry. Data can be uploaded by nearly anyone whether it's done remotely in the field or by office personnel. Using Capturx, they can keep their “All Digital” goal, even where lap tops and PDAs can't go.

*“Our mobile workers have not had ANY problems in the field. No training necessary. Capturx doesn't interrupt our everyday workflow,”* says Steven Vanderveer, Facilities Analyst at City of Seattle.