

# Optimized Scheduling Delivers Huge Efficiencies to Ohio Department of Commerce (ODC)

## The Organization

The Division of Industrial Compliance (DIC) for the State of Ohio is responsible for overseeing enforcement of the Ohio building code. It reviews building and construction plans, and performs inspections on the plumbing, electrical, mechanical and structural systems for those construction projects. The division also conducts ongoing, regularly scheduled inspections on existing elevators, escalators and boilers, as well as bedding and upholstered products throughout the state. Over half of DIC's 260 employees are field inspectors.

## The Challenge

Ohio's Division of Industrial Compliance faced several challenges. The first was to provide a timely review of construction project plans for engineers, contractors and architects working on commercial or multiple-unit residential projects. In 2001 alone, approximately 8,000 plans were submitted.

The second challenge was to make efficient, on-site inspection services available for projects once they were approved. Because the pace of most construction projects is unpredictable, this work is typically on-demand. It is also highly time-sensitive – if a plumbing, electrical, mechanical or structural inspection doesn't take place when the contractor needs it, construction will be slowed or halted, and money will be lost.

DIC's existing phone and paper based scheduling process was extremely inefficient. Contractors would call individual inspectors or a central scheduling office to set up appointments. There was no visibility into the activities of individual inspectors, which made it difficult to determine whether they were able to stay on schedule and meet the day's commitments. "This has been our biggest area of shortcoming," explained Dave Williamson, Superintendent of the ODC's Office of Industrial Compliance. "We were unable to determine how well we were meeting demand, or how efficiently we were handling the process."



## KEY BENEFITS

- **25-30% increase in number of daily inspections**
- **Reduced gas and mileage overhead, due to more efficient street level routing**
- **Increased efficiency, due to ClickSchedule's ability to juggle multiple inspectors, requirements, skill sets and time constraints, some of which overlap**
- **Seamless integration with ClickAnalyze will allow for detailed and precise service performance measurement**

The third challenge was to meet the requirement to inspect up to 3,500 elevators, escalators and boilers per month. A limited number of inspectors were responsible for covering the entire state, and scheduling was inefficient. As a result, there was a growing backlog.

## Solution Approach

DIC determined that the key to overcoming all of their inspection challenges was to gain control of the scheduling process. Specifically, they were looking to create efficient and economical scheduling, dispatch and routing of multiple trades (electrical, plumbing, mechanical, structural, elevator, escalator or boiler) with multiple standards for inspections.





By utilizing optimized scheduling, DIC would be able to place the most qualified inspector, at the scheduled time, based on skills, standards and proficiency. Other factors included location, drive time and availability. The goal, according to DIC Superintendent Dave Williamson, was "to provide the highest, most efficient level of regulatory service with the least amount of pain for both customers and internal staff."

## Implementation Highlights

DIC decided on a phased approach over a three-to-five year period. ClickSchedule was chosen in November 2000, followed by the integration of the solution with the existing database system. Once the work was complete, a pilot version of the plans, specifications and construction compliance scheduling system was rolled out. The boiler, elevator, and escalator inspection system followed.

Simultaneously, internal training was taking place. In order to prepare their largely non-computerized workforce, the DIC conducted extensive on-site education in how the new system would operate. Finally, they got the word out to their customers, the engineers, architects and contractors who make up their largest revenue base – that they had increased their inspection capacity.

Now, when customers call one of the two dispatchers and request an inspection, ClickSchedule slots the request into a "most optimum" time frame. A job ticket is automatically created and faxed out to the field inspector.

ClickSchedule has enabled DIC to optimize the scheduling process, allowing them to fit more inspections in per day. At the same time, they're able to geographically group inspections together much more efficiently, saving time, gasoline and mileage costs. As their reliability increases, so does customer satisfaction.

Once the inspection process has been fully automated, DIC plans to examine ClickAnalyze, which will allow DIC to identify which factors are limiting the maximum number of inspections per day, including the level of resources, and how efficiently they're performing. The resulting shifts in schedule and dispatch are expected to further streamline and optimize the process, and ensure that DIC can easily meet demand.

"We have been able to improve our daily scheduling efficiency and resource utilization by over 25%."

- Dave Williamson, Superintendent Ohio  
Division of Industrial Compliance

- For more information on Ohio see [www.com.state.oh.us](http://www.com.state.oh.us)
- For more information on ClickSoftware see [www.clicksoftware.com](http://www.clicksoftware.com)

### ClickSoftware Inc.

35 Corporate Drive, Suite 140,  
Burlington, MA 01803, USA  
Tel: (888) 438 3308, (781) 272 5903  
Fax: (781) 272 6409

### ClickSoftware APAC

Level 23, HWT Tower,  
40 City Road,  
Southgate, Victoria 3006, Australia  
Tel: +61 (0)3 9674 7295  
Fax: +61 (0)3 9674 7320

### ClickSoftware Europe

The Priory, Stomp Road,  
Burnham, Bucks, SL1 7LW, UK  
Tel: + 44 (0)1628 607000  
Fax: + 44 (0)1628 607001

### ClickSoftware Central Europe GmbH

Hanauer Landstr. 136,  
D-60314 Frankfurt Germany  
Tel: + 49 (0) 69 489813 0  
Fax: + 49 (0) 69 489813 99