

MEMORANDUM

To: Mr. David Williams
From: Jim Higashi
CC: Carl Krebs, Suany Chough
Date: 9/8/2006
Re: Guest Flow Control and Monitoring Systems

As noted in the Concept Narrative for Project No. 7383-10 issued by Code Consultants Professional Engineers, PC, the calculated occupant load for the Museum is 8,100 visitors, while the Actual Occupant Load as currently recommended by Management Resources is 2,250 visitors. The primary reason for the large differences in the two figures centers on the ability of the visitor areas to safely handle the actual occupancy as opposed to the number of visitors the Museum while providing a quality visitor experience and the throughput potential of the various exhibit areas.

Programs, processes and equipment to control visitation would integrate the following features:

Timed entry ticket media

On all ticket and admission media to the Memorial/Museum will be a confirmation number and a time stamp in addition to a bar code. The time reservation system allows each ticket be valid only for a specific time period during a given day. Time intervals will be in five minute increments and tickets will be valid for a specific period after the time printed on the ticket media. Normally this period would equal one hour, but can be expanded or contracted given a specific day's operating conditions. By utilizing a time reservation system, it is possible to control and spread visitation to the Museum to assist in insuring that capacity limits are not exceeded.

Ticket media will be checked and validated before visitors enter the VIOC and security screening area by two to three staff members (depending and anticipated day's attendance forecasts) using portable scanners. By using hand held ticket scanners instead of the traditional turnstile counting and control systems, the Memorial/Museum will have both better visitor service and more flexibility in adjusting its queuing and visitor entrance area based on visitor demand.

Continuous Radio Communication

Perhaps the most important aspect of monitoring guest flow is the ability of staff members, both inside and outside the Museum, to have instant communication with each other. This will be accomplished with personal radio transmitters and headsets linked with each other and the central communications center through a common radio channel. If an area of the Museum is becoming crowded to the point that it affects the ability of the Museum to provide the visitors with a full experience, staff members can communicate to admissions personnel to adjust the flow of visitors into the VIOC/Museum venue.

Visitor Counting Technology

Person counting devices that do not rely on actual physical contact have become fairly common in both the retail and museum industries. Located at key positions, such as the exit/entry area of escalators and elevators to the 242' Bedrock Level of the Memorial/Museum, these devices allow real-time counts of visitors entering and exiting a given area. The central communications/dispatch center will actively monitor the reading from the counting equipment and communicate necessary information concerning the number of visitors in any given area to staff members who are tasked with restricting guest flow to insure that occupancy for those given areas is not exceeded.

Visitor Counting Technology will allow the Museum to:

- Analyze pedestrian traffic by entrance to both the VIOC and specific areas within the Memorial/Museum
- Know the average time spent by visitors in a specific area or exhibit
- Track problematic guest flow areas and times
- Identify peak traffic times
- Adjust the Museum's public communication strategies

Visitor counting instruments come in many forms, from overhead sensors to horizontal counters. (See next page.) These devices tend to use either ocular or heat sensing sensors to count the persons who pass a given point. It is likely a combination of wireless and traditional communication line systems will need to be used due to the indoor, below ground nature of the Museum. It is likely that both the ticket scanners and visitor counters will be used for the Museum.

These counting devices are suggested to be located at the following locations to determine the number of visitors on each level:

- Escalators
- Any public elevators
- Any public stairways

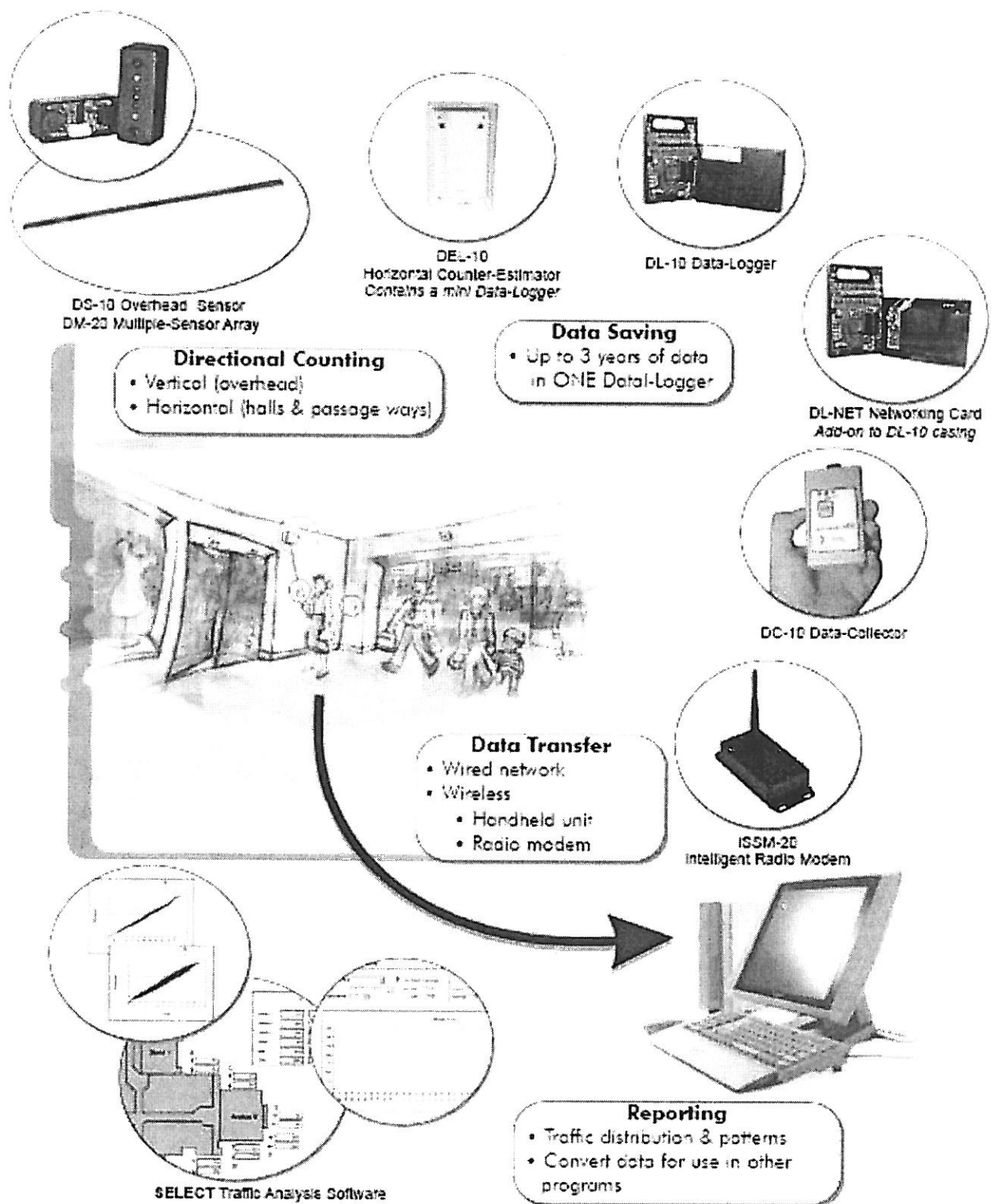


Figure 1 Image from Infodev Electronic Designers, Inc.