

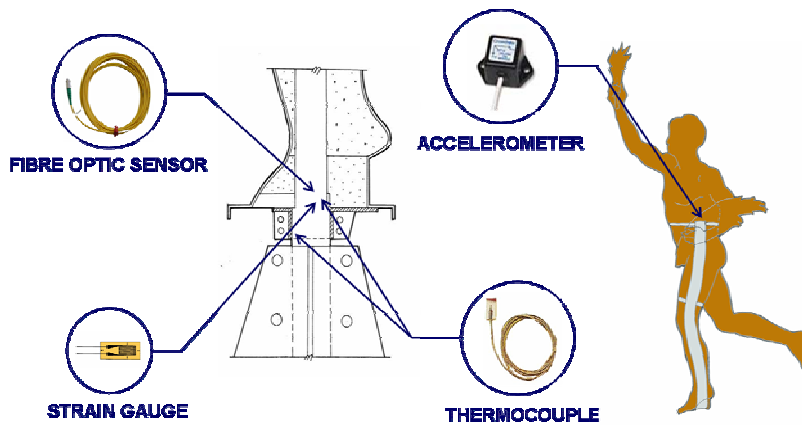
Golden Boy Statue - Canada



Quick Facts about the Golden Boy

- **Name and Location:** Golden Boy – Winnipeg, MB, Canada
- **Owner:** Government of Manitoba
- **Structure category:** Heritage statue
- **Spans and dimensions:** Statue stands 4.0 metres tall (13.2 feet) from his toes to the tip of his torch. Cast in bronze, weighs about 1600 lbs.
- **Structural system:** 1.74 m long steel shaft, fixed from one end
- **Start of SHM:** October, 2001
- **Number of sensors installed:** 16
- **Instrumentation design by:** ISIS Canada – University of Manitoba

Project Description

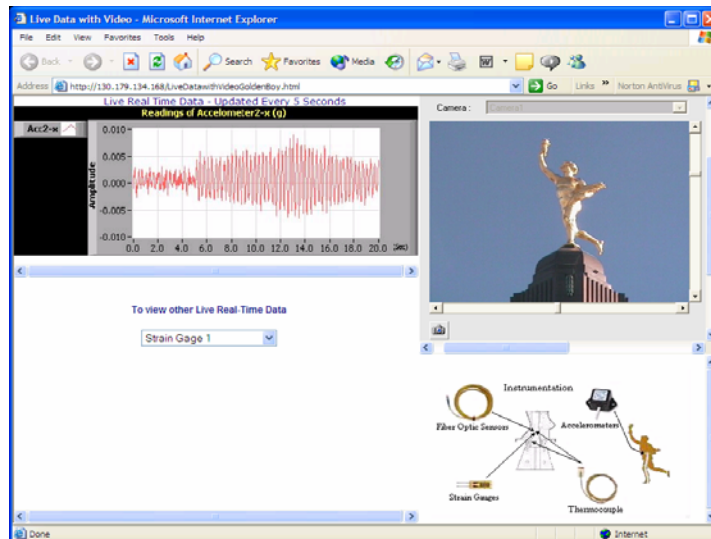


Cross-section of the Golden Boy support shaft

Sensor Details

Type	Number	Location
Fibre optic sensors	4	At the support shaft
Electric foil strain gauges	8	At the support shaft
Thermocouples	1	Close to the gauges
Accelerometer	2	Top of the shaft
Wind Meter	1	On the roof of the legislative building

Examples of Outcomes



Screen shot of Golden Boy live data showing natural frequencies

Benefits of using SHM Technologies

- Analysis of the SHM data will contribute to the development of cost efficient maintenance procedures that will save taxpayer dollars over time.



Results of using SHM Technologies

- **Early access to information about the physical and structural state of the statue will help identify potential risks.**
- **Knowledge gained from analyzing the SHM results can be used to create safer and better designs for similar structures.**