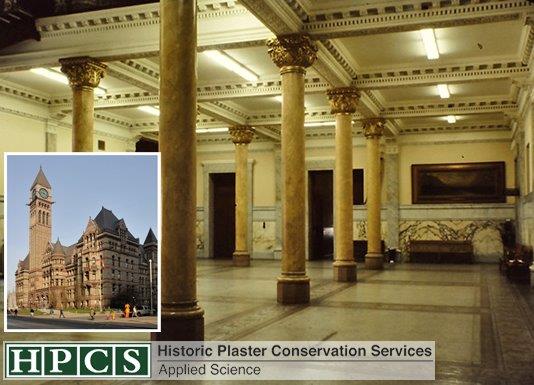
# Old City Hall

Toronto, Ontario (1899)

**The Building:**The Richardsonian Romanesque former City Hall is one of the largest buildings in Toronto and was the largest civic building in North America upon completion in 1899.

**Consolidating Plaster from a Remote Location in 150 Rooms**The collapse of a section of office ceiling in 2006 precipitated an investigation by HPCS that revealed widespread delamination of wood lath and plaster ceilings in more than 300 rooms, many with elaborate plaster cornices and other details.

Interestingly, the architect, E.J. Lennox had chosen to use plaster on wood lath in offices and secondary spaces, and the more modern expanded metal lath on ceilings in public spaces and council chambers. The metal lath and plaster ceilings have held up beautifully. This became apparent in 2005 when HPCS, working with Chris Hall of +VG Architects, conducted a thorough investigation of all 415 ceilings in the building as part of the planning for a new HVAC system.



150 rooms in this huge structure are underwent treatment from a remote location

When the HVAC contract was let, HPCS was asked to coordinate the conservation of the ceiling plaster. Trials were conducted and HPCS was able to successfully demonstrate a consolidation methodology. The use of an HPCS-designed [**Remote Consolidant Applicator**](http://ww2.historicplaster.com/tools/remote-consolidant-applicator/)(RCA) was a practical option to treat 150 of the most vulnerable important heritage designated ceilings in the building. The RCA deposits measured amounts of the appropriate acrylic resin in pre-determined shots through 1/4" holes drilled at 6' intervals across the ceiling. This is a very low level of intervention, particularly in light of the intensity and breadth of the treatment accomplished.

Cornices in these and other rooms were treated with another HPCS device - the **Cornice Treatment Wand™**. The development of these tools meant that measured amounts of evenly distributed consolidation primer and consolidation agent could for the first time be predictably and efficiently applied to the upper side of wood lath and plaster ceilings without the need to remove flooring in the room above.

Plaster consolidation of more than 50,000 sq. ft. of ceilings is now being carried out by members of the International Union of Painters and Allied Trades who have received special training from HPCS. Work is done only during the overnight hours when the building is closed, and each day, the spaces have to be returned to active use by the tenants. Historic Plaster Conservation Services provides quality control supervision and testing to ensure the efficacy of the treatments.

The project, scheduled to run over four years, is currently (March 2014) about 75% complete with consistently excellent results, as evidenced by samples taken from the ceilings after treatment. Throughout this project, the building has remained intensely occupied by the Attorney General of Ontario, with dozens of law courts operating seven days per week from 8:00 a.m. to 10 p.m.

### HPCS Products Used

[CO Consolidant HPCS product category badge](http://ww2.historicplaster.com/products/consolidants/)

[CO S-50 Primer™](http://ww2.historicplaster.com/products/consolidants/)

[CO Consolidant HPCS product category badge](http://ww2.historicplaster.com/products/consolidants/)

[CO R-100 Consolidant™](http://ww2.historicplaster.com/products/consolidants/)

### Tools Used

[HPCS Micro-Jacks™](http://ww2.historicplaster.com/tools/hpcs-micro-jacks/)  
[Remote Consolidant Applicator](http://ww2.historicplaster.com/tools/remote-consolidant-applicator/)