



The Other Pillars:
Social & Economic Sustainability

Rehabilitation Projects and Local Labour Creation

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Development News

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It is no longer news that **capital funding for infrastructure creates a high proportion of employment opportunities for low dollar investments.**



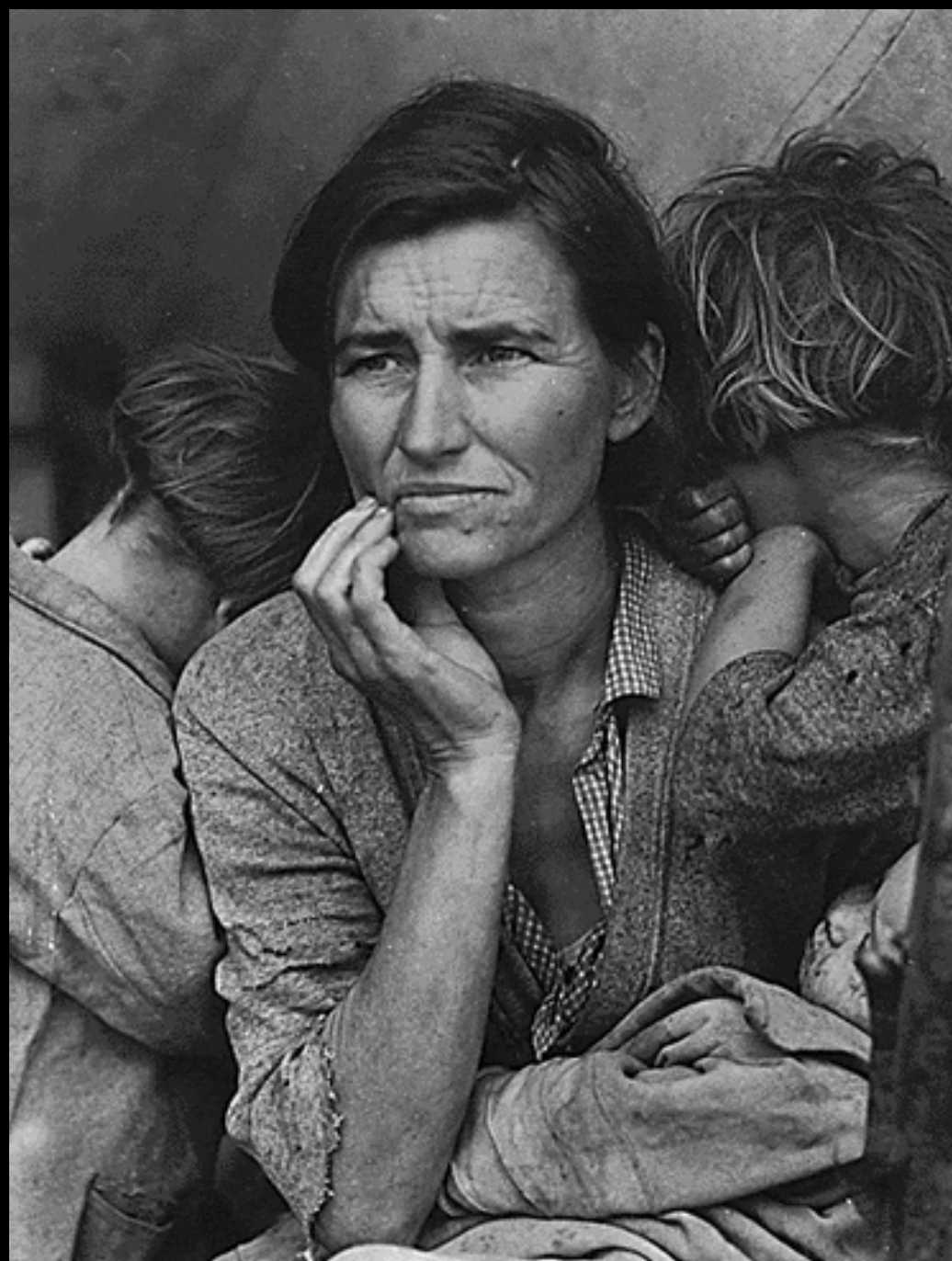


Development News

**Take a look
at any street
in Ontario.**

Development News

It is no longer news that **rehabilitation work is more labour-than-material intensive, and benefits local economies.** ²



Development News

A survey of our building projects shows that rehabilitation work involves at least

60% -70% local labor
compared with less than 40%
for new buildings.



Old Toronto City Hall





Queens Park



Don Jail Bridgepoint Hospital



Toronto General Hospital - MaRs



Union Station



Buenos Aires - Post Office Palace Opera House



Toronto Power Generating Station
Niagara Falls

Heritage
Development

**What's so
great about
that?**

Heritage
Development

= **Community
Sustainability**



Castle Kilbride was built in 1882 by Livingston, a linseed oil manufacturer. Its style is Italianate revival. The building is also very influenced by Venetian motives and crafts. It is interesting to note that this Scotsman imported not only materials, but actual labor from Venice for the woodwork, masonry and paintings.





The original building was purchased by the Township for the purposes of municipal offices. It was only 6,000 sq.ft. in size and the program for the new offices was in excess of 30,000 sq.ft.

This presented a special problem of not only having to preserve the fabric of the building, but also having to preserve the ensemble of exterior space and feel of the setting.



Heritage
Development
Cost Benefits

1 Buildings are re-used.

Cost & energy savings due to:

- little or no demolition
- reduced waste to landfill
- minimal new materials



The existing wood work was beyond repair. To solve this challenge it was:

- Surveyed
- Photographed
- Documented
- Dissembled
- Catalogued
- Assessed
- Recreated

The existing porches were dismantled. Paint was removed from the masonry after it was established that the original brick was not painted until the 1930's.

Samples of paint were removed and sent to a lab for testing to determine the type of cleaning agent that was to be used.

We found that the mortar joints were triple raked which is very labor intensive and rare. Their condition was pristine in large part.





Finished product incorporating:

- proper ventilation and foundation
- approximately 15% of original material was used .



2 Local labour hours increase.

Community investment due to:

- local job creation
- specialized skill development
- continued conservation work & maintenance of building



Another example of deterioration beyond rational repair...



...and the finished product.





Another very dramatic transformation.



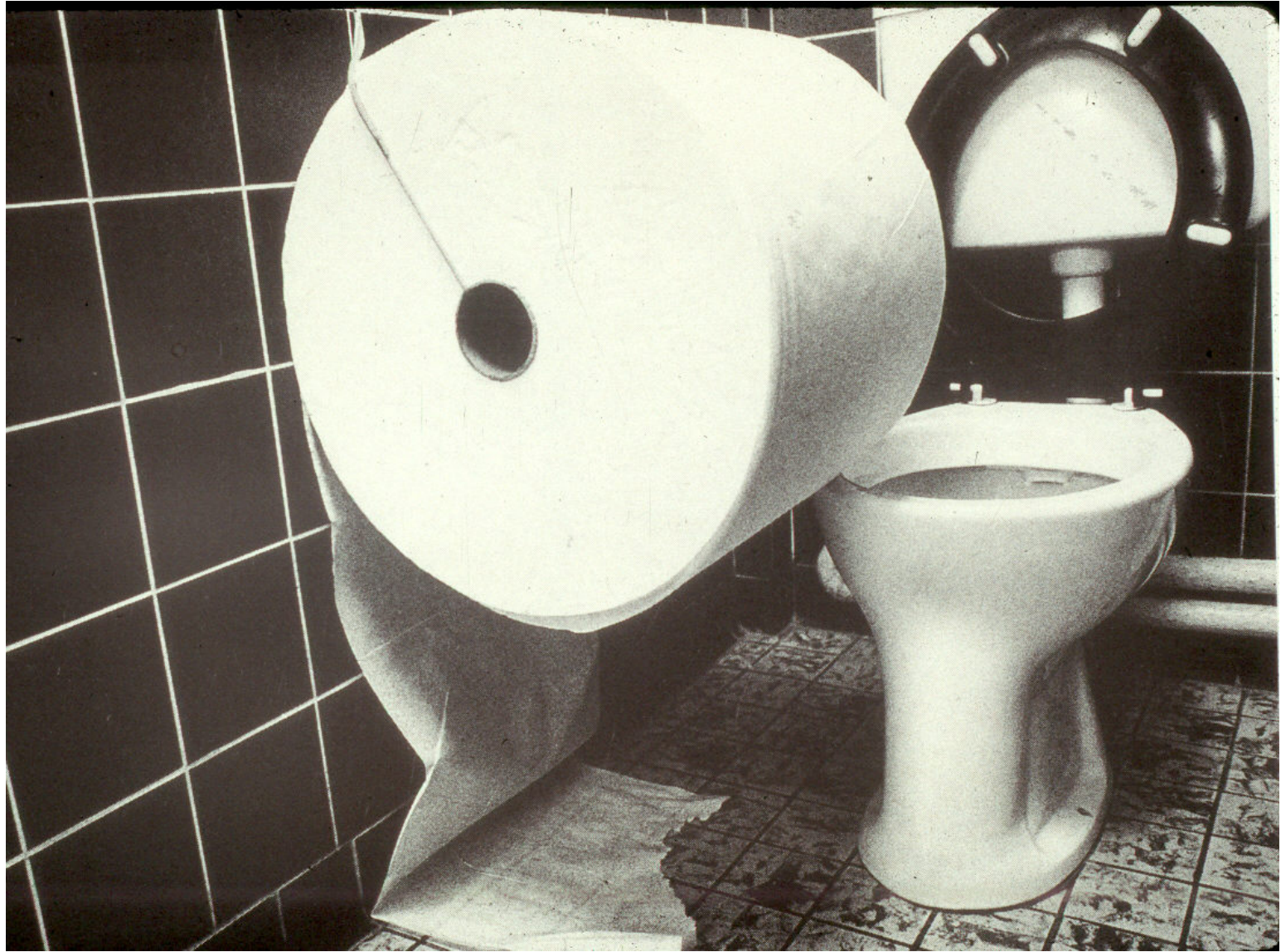
Heritage
Development
Cost Benefits

“Historic buildings may be the latest area to get the television makeover treatment, but **it will take more than glossy production values to hide a worrying statistic.**

Heritage Development Cost Benefits

...today **there are fewer than 40,000 craftspeople with the necessary specialist skills to maintain Britain's historic environment**, which includes more than 430,000 listed buildings.”³







Heritage
Development
Cost Benefits

3 Stock of heritage buildings is increasing.

Modern buildings ultimately become heritage resources









Belvedere, which seems to be a typical feature in the finger lake area, was used to inspect farm hand productivity.



Removing of old cupola

This is an innovative technique first used in 1972 by our firm. The cost was reduced from \$ 72.000 to \$ 9.000.!!

12 foot ladders whereused instead of scaffolding





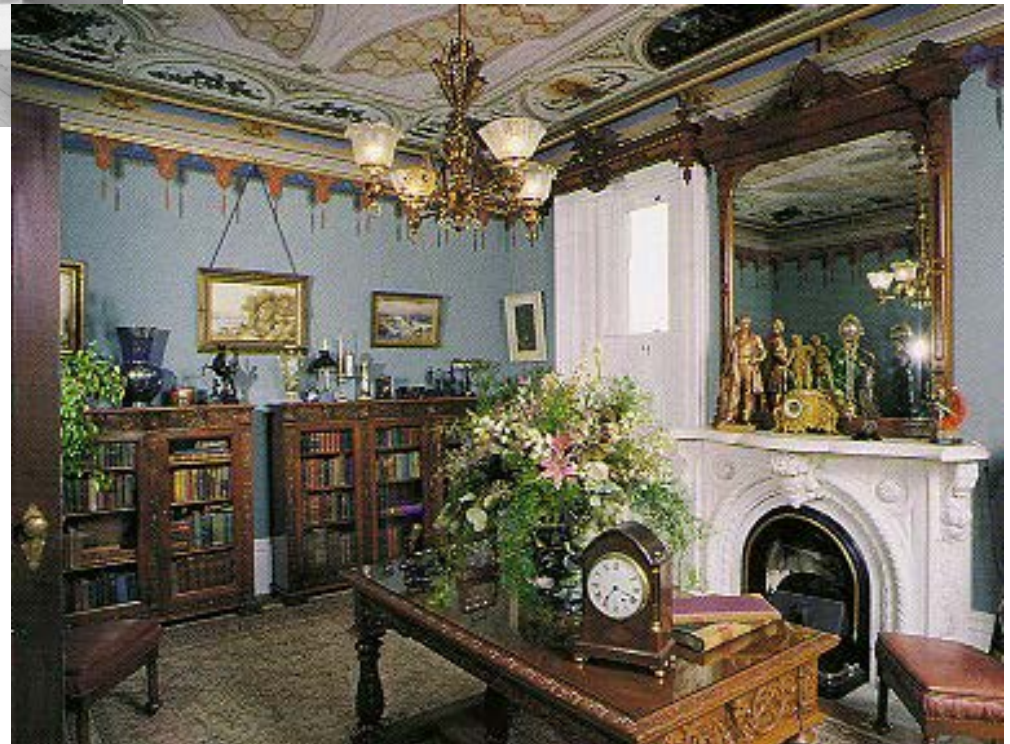
Eight main rooms in the house were lined with a lime based plaster with trompe l'oeil paintings. The plaster was painted when wet (fresco technique) by applying water to it to maintain its humidity level in order to complete the paintings.

- winter
- not constant temperature
- moisture

Complete plaster conservation required:

- Liquid plaster bonding agent
- Screws
- Re-adhesion

Furnishing were also re-assembled and restored.





Re-adhesion of paint surface was required. This was done like a jig-saw puzzle – one chip at a time.



Pigment recover.



Beautiful results.





House was to be used for museum instead of offices. Some meeting rooms were incorporated while the basement became used for archives.





Before



After





Staircase and Hallway restoration.





Incorporating the old into the new.



Capital Investment

By integrating the ratio with project numbers, it's possible to **measure the labour hours that building rehabilitation provides.**









St. Thomas Mayor





St. Thomas City Hall

COST ANALYSIS

Building Budget: \$6,400,000.00

C.F.I.P. Grant \$ 750,000.00

12% Provincial Investment

1. Reconstruction Work

Labour = 90%

Material= 10%

Total Man-Hours Generated: 23,739 hours

2. Structural Steel Reinforcing

Labour = 65%

Material= 35%

Total Man-Hours Generated: 1,688 hours

3. Structural Concrete

Labour = 68%

Material= 32%

Total Man-Hours Generated: 7,276 hours

4. Roof Restoration

Labour = 66%

Material= 34%

Total Man-Hours Generated: 11,000 hours

5. Window Restoration

Labour = 90%

Material= 10%

Total Man-Hours Generated: 7,725 hours

6. Masonry Restoration

Labour = 87%

Material= 13%

Total Man-Hours Generated: 13,000 hours

7. Millwork

Labour = 65%

Materials = 35%

Total Man-Hours Generated: 5,900 hours

Grand Total Labor Hours Generated: 70,328 hours*

All figures submitted by sub-trades and the general contractor.

Provincial Investment \$750,000

Labor Yield 10.66 hours/\$1 invested

48 taxes not yet created in 1867

Airline surcharge tax
Airline Fuel Tax
Airport Maintenance Tax
Building Permit Tax
Cigarette Tax
Corporate Income Tax
Death Tax
Dog License Tax
Driving Permit Tax
Environmental Tax (Fee)
Excise Taxes
Federal Income Tax
Federal Unemployment (UI)
Fishing License Tax
Food License Tax
Gasoline Tax (too much per litre)
Gross Receipts Tax
Health Tax
Hunting License Tax
Hydro Tax
Inheritance Tax
Interest Tax
Liquor Tax
Luxury Taxes

Medicare Tax
Mortgage Tax
Personal Income Tax
Property Tax
Poverty Tax
Prescription Drug Tax
Provincial Income Tax
Real Estate Tax
Recreational Vehicle Tax
Retail Sales Tax
Service Charge Tax
School Tax
Telephone Federal Tax
Telephone Federal, Provincial and Local
Surcharge Taxes
Telephone Minimum Usage Surcharge Tax
Vehicle License Registration Tax
Vehicle Sales Tax
Water Tax
Watercraft Registration Tax
Well Permit Tax
Workers Compensation Tax
Marriage License Tax