The Ultimate Act of Sustainability

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Learning Objectives

At the conclusion of this program, learners will be able to:

• Compare the benefits of restoration in comparison to new development
• Recognize the economic impact of restoration on local communities
• Explain the regenerative effect restoration has on cities
• Recognize how building restoration contributes to sustainable development

An Unconventional Look at Restoration

URBAN RECONSTRUCTION
Urban Reconstruction

Industry Drivers
- Urban growth
- Gentrification
- Population shift
- Technology
- Labor shortage
- Sustainability

“Old buildings are the new economy.”
Jean Carron, FAIA
Principal
Goody, Clancy & Associates

Sustainability is about more than CO₂

Sustainability as a Business Driver

- Sustainable economic growth
- Social change that lasts
- Solutions that maximize existing resources

Restoration plays a vital role

What is a Building

- 4 walls and a roof
- Brick and mortar
- A structure
- An asset

“Cities are only successful when they work for everyone.”
Forum Online – Preservation Leadership Forum
Restoration Plays a Vital Role

“If you want to get people back to work, tuckpoint a building.”
Roger Oberg, Principal BKBM Engineers

Economic Impact of Restoration

What can the Restoration industry learn from Preservationists?

Restoration is a Constant in Construction

The Driver - 3 C’s
- Constraint
  Running out of quality Greenfield areas for development
- Contamination
  Developed land is contaminated
- Corrosion
  Built environment is deteriorating

Drivers for Restoration are “built in” and permanent

Top 3 Reasons

1. Restoration creates local jobs
2. Restoration creates more local jobs than new construction
3. Greater impact on local suppliers
4. Incremental development
5. Counter cyclical activity that stabilizes local economies
6. Life expectancy of restored buildings
7. An effective economic development strategy
8. Enables cities to compete with suburbs
9. Efficient spaces for new uses
10. Restoration is fiscally responsible
**Restoration Creates Local Jobs**

- Majority of cost related to labor – hired locally
- Local wages stay in the community
- New demand creates need for more local services

“In Michigan, $1 million in building rehabilitation creates 12 more jobs than does manufacturing $1 million worth of cars.”

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**Restoration is Incremental Development**

“Old one-shot or quick fix formulas for attracting businesses or building sports stadiums or increasing tourist advertising typically fail to deal with the root causes of contemporary place predicaments.”

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**Restoration is Fiscally Responsible**

- 44,000 commercial buildings are demolished annually in the United States
- Demolition of buildings in the United States products about 124 million tons of debris a year
- 2.5M buildings built during the “age of plastics”

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**Benefits Beyond the Building**

- Nothing happens in a vacuum
- It is impossible to improve one without affecting others
- Restoration becomes a catalyst for more restoration
- The effects of restoration are far reaching

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**Transformative Power of Restoration**

1. Restoration leads to ReUrbanism
2. Restoration demonstrates public commitment
3. Increases the value of restored buildings
4. Increases the value of adjacent buildings
5. Creates a catalyst for investment
6. Restored buildings are ideal for business incubation
7. Quality of life is enhanced
8. Downtown reflects community’s leadership
9. Decrease in crime
10. Provides a diversity of space and rent levels

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**Social Benefits of Restoration**

Top 3 Reasons
Restoration Leads to ReUrbanism

- Gentrification lends stability to neighborhoods
- Homesteading brings stability and reduction in crime
- Homesteading leads to more investment

"Ownership promotes virtue and responsibility."
Aristotle

Restoration is a Catalyst for Investment

- Restored neighborhoods create economic vitality
- Improved values attract investment

Quality of Life is Enhanced

- New business growth
- Private investment
- Increase in tourism
- Increased property values
- Sense of neighborhood
- Job creation
- Sensible land use
- Increased property/sales tax
- Delute pockets of poverty, deterioration

Advisory Council on Historic Preservation

Environmental Impact of Restoration

Buildings consume:
- 70% of all electricity
- 37% of all energy
- 28% of all water
- 30% of wood and materials

Building Products:
- 35% of solid waste in landfills
- 36% of CO2
- 45% of SO2
- 19% of NOx
- 10% of the particulate emissions

Buildings and Climate Change
Current Industry Response

- Green building and sustainable construction have become table stakes
- Building rating systems
- Limited emphasis on restoration
- Federal mandates
- State and local regulation

"We can't build our way out of the global warming crisis. We have to conserve our way out. That means we have to make better, wiser use of what we’ve already built."
- Richard Moe, Former President NTHP

Environmental Impact of Restoration

What is more sustainable than reusing an existing building?

1. Restoration uses and preserves existing materials
2. Restoration eliminates solid waste from landfills
3. Most older buildings are composed of low E² materials
4. Many older buildings are sited to take advantage of light and wind
5. Older buildings can be energy efficient
6. Restored buildings utilize existing infrastructure
7. Restored buildings are typically located near mass transportation
8. Most downtowns are pedestrian friendly
9. New construction is dependent upon high E² materials
10. New construction creates 1.5x more greenhouse gas

Top 3 Reasons

Restoration Uses Existing Resources

- Intrinsic in its name, restoration restores materials and assemblies to their original condition

It is irresponsible to not take care of that which we already have

Restoration Uses Existing Infrastructure

- Utilizes existing utilities
- No need to extend services
- Existing roads and highways
- Minimizes disruption and displacement

Older Buildings Can be Energy Efficient

- Most older buildings composed of brick, stone and masonry
- Thermal mass effect of load bearing masonry walls
- Buildings were sited to take advantage of light and wind
- Advances in window technology has increased energy performance
Where Do We Go From Here?

- Change your paradigm
- Collaborate
- Tell our story
- Solve the development gap
- Improve our product

Change Your Paradigm

- The work you do is important
- What you do matters
- Restoration makes a difference

Collaborate

- Grow the entire pie
- Solve challenges together
- Collective voice

Tell Our Story

- Restoration is a powerful tool
- Industry of experts filled with passion
- Collective voice
- Our industry’s value proposition

Solve the Development Gap

- Make buildings economically viable
- Solve the challenges of “Recent Past” buildings
- Develop better tools to demonstrate the value

Improve Our Product

- Solve hard problems
- Raise level of performance
- Develop meaningful standards
- New approaches to old problems
A Good Idea

Building Restoration can be a major element of Urban Reconstruction as well as the foundation of sustainable development.

Sources

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- History’s Green Genes – Walter Sedovic
- Sustainable Stewardship: Historic Preservation’s Essential Role in Fighting Climate Change – Richard Moe
- Preservation of Modern Architecture – Theodore H.M. Prudon
- Social Benefits of Homeownership & Stable Housing – National Association of Realtors
- Preservation Needs a Vocabulary Reset – Clem Labine
- Silver Lining – Peter Miller
- The Real Change to Come – Michael Lykoudis

Four Business Lines in North America

BASF Corporate Overview

- Admixture Systems
  - Concrete Admixtures
  - Cement Additives
  - Solutions for Mining and Tunneling
- Construction Systems
  - Concrete Repair and Protection
  - Air Water Resistant Barriers
  - Sealants and Waterproofing
  - Commercial Flooring
- Wall Systems
  - Wall System solutions for EIFS, Stucco
- Expansion Control Systems

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