BROWNFIELDS METRICS -SELLING BROWNFIELDS THROUGH IMPACT ANALYSIS

Evans Paull, Principal Redevelopment Economics

202-329-4283

REDEVELOPMENT ECONOMICS EXPERIENCE IN IMPACT ANALYSIS

Program Analysis

- New York State Brownfields Tax Credit
- Massachusetts Brownfields Tax Credit
- Wisconsin State Brownfields Incentives
- Oregon State Brownfields Programs
- Maryland Historic Preservation Tax Credit
- National
 - Section 198
 - Brownfields impact literature review - NEMW

Project Analysis

- Brockton, MA New Markets Tax Credits
- Ranson, WV Brownfields Areawide Plan





Baltimore – Waterfront TOD



Start w/ This

Clean it up



Save this





RESPONDING TO POLICY NEEDS NEW YORK STATE BROWNFIELDS TAX CREDIT ANALYSIS

Pre-study Critiques of BCP	Study Findings
Assisted sites are not in distressed areas	63% of sites are in below median income CT's
Tax credit is not assisting economic development	 15,000 direct (21,000 direct/indirect) jobs, including 16 manufacturing projects - 2500 jobs 2 headquarters projects - 2,000 jobs
Program is a drain on the state treasury	\$1.00 state outlay recoups \$2.11 in direct tax revenues (\$3.44 in direct and indirect)

ECONOMIC STIMULUS NEW YORK BROWNFIELDS TAX CREDIT VS. ROAD BUILDING

	Road Building	BCP sites	Impacts favor:
Impacts of construction	Direct and indirect jobs attributable to direct public spending	Public spending is leveraging private spending, 8.24 times the public-dollars-only road spending.	BCP
Permanent jobs	Unclear	15,000 permanent jobs at BCP-assisted projects	BCP
Distressed area impacts	Neutral	63% of BCP projects areas are below the state median	BCP
Smart growth impacts	More often works to accommodate sprawl	All in existing communities; most projects are walkable.	BCP
Protection of public health	No benefit	142 sites cleaned up	BCP

RESPONDING TO POLICY NEEDS: SIMPLIFYING THE ACTION-NO ACTION ALTERNATIVES IN

Benefits of continued leadership on		The quantitative findings from past		Costs of inaction	
brownfields		brownfields investments			
•	Stimulate economic development in existing communities	•	\$3.3 billion investments in existing communities 29,000 new/retained permanent jobs	• •	Blighted neighborhoods, disinvestment Sprawl Jobs lost to other states
•	Jobs/economic activity in distressed areas	•	50% of jobs generated in CT's below 80 percent of the state median HH income	•	Siphon growth to outer suburbs Continue economic distress for older communities
•	Improve fiscal health of localities Increase property values	•	Post redevelopment assessed values exceed pre-development 3.5 to 1	•	Lower property values, unpaid taxes Increased burden to taxpayers due to tax foreclosure
•	State fiscal benefits	•	State's brownfields investments recouped 14-fold	•	Increased cost to provide infrastructure Enforcement and policing costs
•	Reduce greenhouse gas emissions	•	Reduce GHG by 16 to 28 percent	•	Increased greenhouse gas emissions
•	Preserve farms and pristine land	•	"Saved" 12,000 acres of greenfields	•	Development of farms and pristine land
•	Cleanup and management of environmental risk	•	4,713 acres of contaminated land assessed and/or cleaned up	•	Continue health risks Contaminated soil and groundwater
•	Create public open space	•	43 sites/340 acres developed as open space	•	Lost opportunity to improve open space
•	Revitalize neighborhoods Catalyze development in the surrounding area	•	7,900 dwelling units located in existing communities 900 units affordable housing	•	Blight Illegal dumping, vandalism

RESPONDING TO POLICY NEEDS: IMPACTS OF ADDITIONAL FEDERAL SPENDING ON BROWNFIELDS

	Double the EPA B – add \$165 million	Brownfields Budget n	Adopt a federal brownfields tax credit w/ \$1 billion cap				
	Assume that federal dollars provide 33% of public investments						
Impact area	Annual impact	20-year impact	Annual impact	20-year impact			
Total investment leveraged	\$4 billion	\$79 billion	\$24 billion	\$480 billion			
Jobs accommodated	30,100 jobs	603,000 jobs	183,000 jobs	3.65 million jobs			
Population accommodated in existing developed area	4,500 households	89,300 households	27,100 households	541,000 households			
Land conservation	3,300 acres	67,000 acres	20,300 acres	406,000 acres			

TRICKS OF THE TRADE – USING NATIONAL DATA

Economic Data

- Leverage total dollars
 - EPA \$1.00 > \$17.79
 - NEMW \$1.00 > \$20.00
- Leverage jobs:
 - **EPA \$13,700 for one job**
 - NEMW \$10,000 -\$13,000 for one job

Environmental Data

- VMT and GHG reduction
 - EPA brownfields save 32 to 57 percent
- Saving land
 - EPA 1 ac redeveloped saves 2 – 4 acres greenfields

TRICKS OF THE TRADE - USING NATIONAL DATA

Local Property Tax Data

NBER: post cleanup - area property values increase

- _____ average increase in assessment of redeveloped properties
 - \$3.4 million per project
 - Post redevelopment values exceed pre-development values 3.5 to 1.
- NBER neighboring properties increase in value due to cleanup:
 - Average aggregate benefit of \$4.1 million (appr 5% increase)
 - Median \$2.0 million



TRICKS OF THE TRADE – USING NATIONAL DATA

Saving infrastructure spending

Smart Growth America

 Compact development saves 38% of infrastructure costs relative to sprawl

Studies that focus on compact/<u>in-fill</u> find higher percentages of 50 to 80%

Massachusetts

Assumed 50% savings

- Saved \$132 million
- If the State savings was 1/3 of the total savings, that would be \$44 million or 83% of the BTC outlay



METHODS

Our redevelopment data sources

- State records, but very limited
- On-line survey of grant recipients
- Internet searching for project records
- Google Earth Pro
- Co-Star and Loopnet
- On-line real property tax records
- Industry averages

IMPLAN for multiplier and tax impacts

- Jobs stress direct impacts
- Biggest benefit of IMPLAN State Taxes

Chart from Massachusetts analysis



METHODS

Modeling VMT reduction for Massachusetts

Measured:

- Walkscore
 - residential- 75.5
 - commercial projects -70.5
- Density 15.6 DU/ac
- Mixed use TOD projects 838 units (20% of all)
- Transit Score (added for later NYS analysis)

VMTs - US Norm vs. BTC, Residents and Employees 25,000 20,000 Annual VMTs 15,000 10,000 5,000 0 BTC projects US norm VMT per Household 21,187 11,653 Commuting VMTs 5,760 4.320

- 51 million fewer VMT
- CO2 reduction of 22,000 metric tons.
- Equivalent of taking 4,300 cars off the road.

VMT AND GHG REDUCTION BENEFITS OF MD HISTORIC TAX CREDIT

- Dual benefit of Energy-Efficient Buildings in Energy-Efficient Locations
- Model for measuring VMT reduction
- H.F. Miller redevelopment - reduce CO₂ by 296 metric tons
 - Reduce VMT by 40%
 - LEED Gold reduce internal energy use by 33%
 - VMT reduction accounts for 55% of differential

HF Miller Tin Can and Box Company/2601 N. Howard Street, Baltimore



RECOMMENDATIONS: LOCAL OR STATE GOVERNMENT MONITORING OF IMPACTS

Use GIS and sortable spreadsheets

- Contaminants
- Cleanup
- Public funds
- Redevelopment
 - Investment
 - Space
 - Jobs
 - Units
- Pre and post property values

- Impact analysis
- Policy analysis
- Strategic planning
- Financing
- Market analysis

Evans Paull, Principal Redevelopment Economics

www.redevelopmenteconomics.com ev@redevelopmenteconomics.com 202-329-4283