



Economic Development in New York City

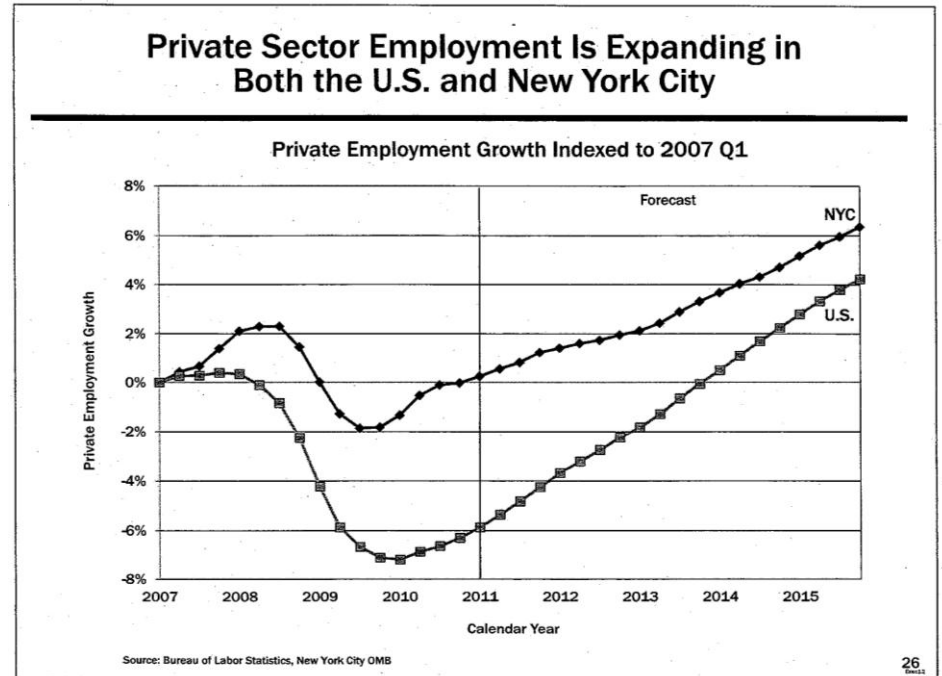
November 29, 2011

New York City Economic Development Corporation

- Who we are:** City's official economic development arm
- Type of organization:** 501(c)(3)
- Number of employees:** ~ 400
- Agency operations:** Under contract with the City
- Responsibilities:** Foster growth throughout the five boroughs
- Capital projects
 - Property management
 - Land sales
 - Financial assistance
 - Area-wide development
 - Advisory work
 - Financial
 - Strategic

In recent years, despite operating in a challenging environment, New York City has generally, outperformed the nation.

Metric	NYC	U.S.
Class A Office Vacancy ¹	9.2%	14.5%
Foreclosure auctions from Oct. 2010 to Oct. 2011 ¹	-76%	-38%
Lost private sector jobs since 2007 ³	.6%	5.2%

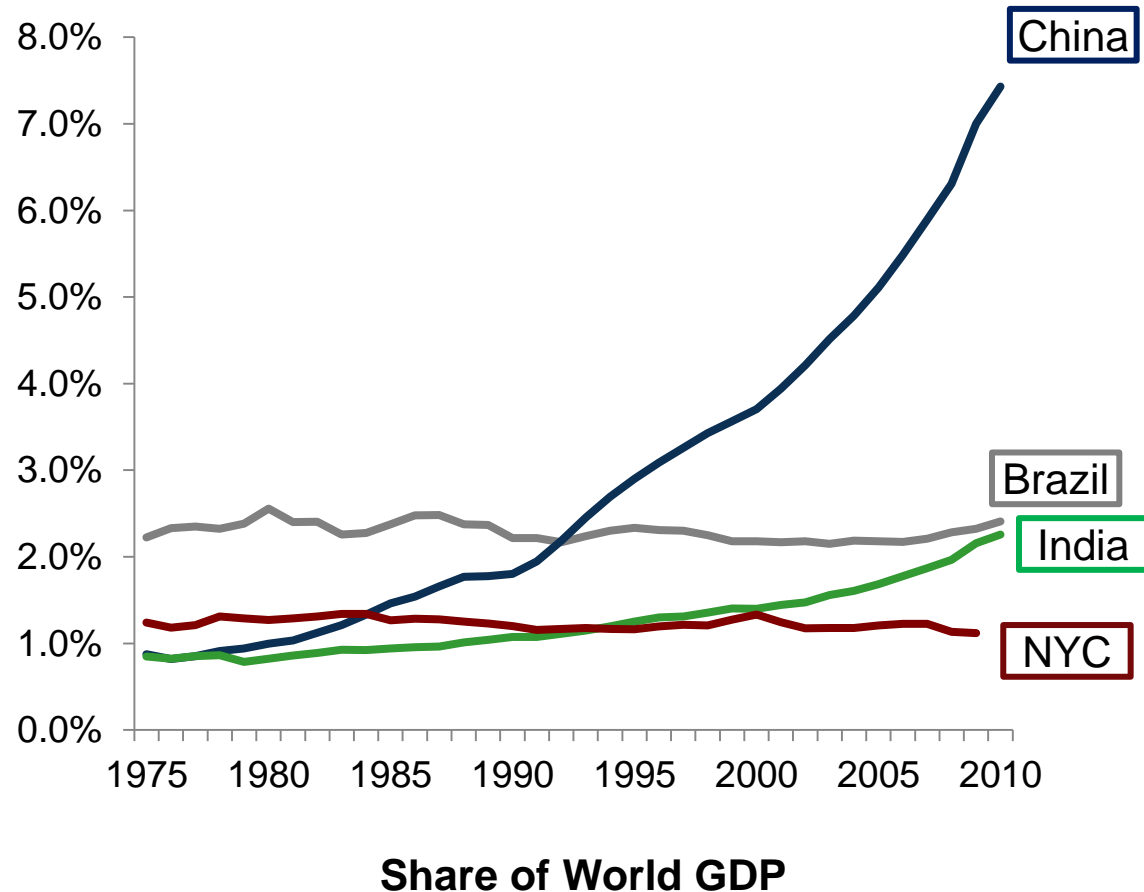


But New York City faces a number of short-term challenges, including a difficult financing atmosphere, persistently high unemployment, and a weak national economy.

Source:1. Costar Quarterly Market Reports 2. RealtyTrac and Property Shark 3. NYS Department of Labor

The City also faces new and significant long-term challenges...

- Change in nation's relative position
- Rise of new global competitor cities
- New technology is lowering barriers to entry



TRANSFORMATION



**Physical
Transformation**



**Economic
Transformation**

21st century businesses require a 21st century physical infrastructure...

- Lessons learned from the past
 - Disinvested in 1970s and 1980s
 - Required billions of dollars and years to recover

- Current capital commitments
 - City capital budget: ~\$27 billion
 - EDC capital budget: ~\$2 billion over 10 years

- Broad definition of infrastructure:
 - Basic infrastructure
 - Amenities
 - Area wide re-development



Luna Park in Coney Island



Water Siphon under construction

Basic infrastructure ranges from pipes and wires to new sustainable, waterborne transportation options....

■ Challenges:

- Re-zoned areas along the East River in Brooklyn and Queens
- Scarce transportation options limited growth

■ Project:

- East River Ferry launched in June
- Ferry route with 7 stops in Queens, Brooklyn and Manhattan

■ Outcome:

- More than 400,000 passengers, far surpassing forecasted levels
- Will encourage development along Queens and Brooklyn's waterfront
 - Capacity for more than 20,000 new residential units



East River Ferry



Ferry Landing

We are also focused on important neighborhood amenities, like schools and parks, including the innovative High Line Park...

- Challenges:
 - Former elevated rail line created opportunity for new public space
 - Untapped development potential in the Chelsea neighborhood

- Project:
 - Transformation of abandoned rail line into a unique public park

- Outcome:
 - Helped to spur \$2 billion in private investment locally
 - Attracted more than 2 million visitors
 - Section Two opened in July



High Line before construction



High Line after construction

We are also working to transform whole neighborhoods, from Willets Point in Queens to historic Coney Island in Brooklyn

- Challenges:
 - Amusement core suffered from
- Project:
 - Grow and support Coney Island as an amusement destination
 - Catalyze local job creation
- Outcome:
 - Opened Luna Park and Scream Zone which have drawn record attendance with 640,000 visitors in 2011
 - Local job growth outperforming the Borough and the City
- Upcoming
 - Steeple Chase Plaza under construction
 - New retail and food tenants in 2012
 - Open 3rd phase of the amusement core



Luna Park in 2009



Luna Park in 2011

TRANSFORMATION



Physical
Transformation



Economic
Transformation

But this is only half a solution...to transform to the capital of innovation,
we must re-think the way we do business.

- Launched nearly 100 initiatives to diversify the economy
- Three-pronged plan:
 - Assisting “legacy industries”
 - Growing emerging industries
 - Promoting entrepreneurship



Mayor Bloomberg announcing Big Apps 1.0 Winners



Hive@55

First, we are working to assist our City's "legacy industries"...

- Help traditional industries transition to 21st century business models
- Sectors include:
 - Media
 - Financial Services
 - Fashion
 - Industrial and Manufacturing



Bush Terminal Industrial Campus



MediaNYC2020

The industrial and manufacturing industries represent 16% of the City's private sector employment, but face significant challenges...

- Challenges:
 - Lack of access to financing
 - Lack of access to modern, right-sized industrial spaces
 - City's support network needs to be re-aligned to meet modern needs
- Project:
 - Suite of initiatives representing \$100 million in City investment
- Outcome:
 - **Financing:** \$10 million food manufacturing fund with Goldman Sachs' 10,000 Small Businesses Initiative
 - **Space:** Transforming the Federal Building, a 1.1MSF vacant warehouse into a state-of-the-art industrial center
 - **Support network:** Industrial "desk" at EDC's Center for Economic Transformation



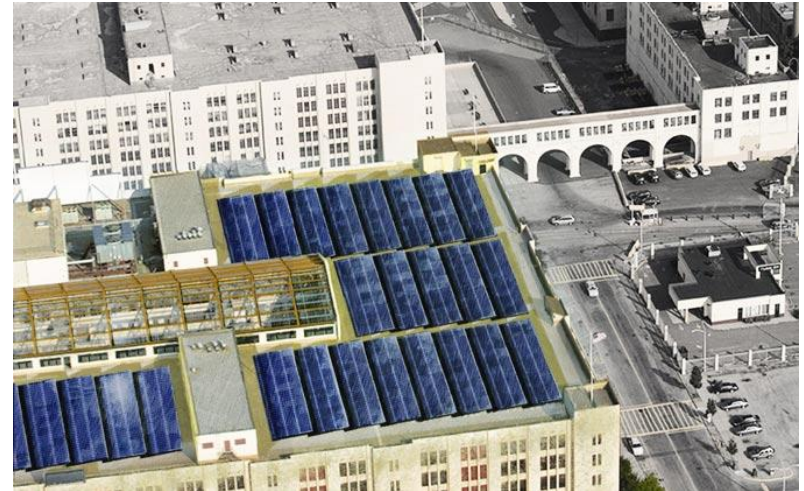
Local food manufacturers



Rendering of Federal Building #2

We are also working to attract potential growth industries...

- Grow industries in which City is competitive, but has traditionally “hit below its weight”
- Sectors include:
 - Green and Clean Technology
 - Television and Film Production
 - Bioscience



Smart Grid demonstration at Brooklyn Army Terminal



NYC Solar Map

The City is a hub for basic scientific research and home to many pharmaceutical headquarters, but there is still room for growth...

■ Challenges:

- City struggles to retain the ~20 companies that spin off from our universities annually
- Companies cited a deficit of affordable wet lab space

■ Project:

- Create additional wet lab space

■ Outcome:

- 1.7MSF of new wet lab space in development at BioBAT and the Alexandria Center for Life Science



Brooklyn Army Terminal



Alexandria Center for Life Science at East River Science Park

We are also focused on promoting entrepreneurship ...

- Create the conditions for companies to thrive, regardless of industry
- Creating the industries of tomorrow by providing resources, including:
 - Access to training and mentoring
 - Access to capital
 - Access to affordable workspace



Big Apps 2.0 Winners



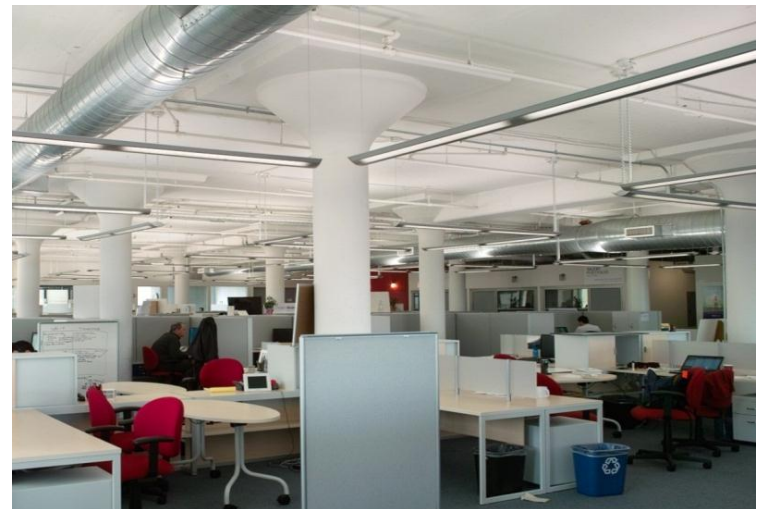
NYC Next Idea Competition

The City is working to provide important resources to entrepreneurs, such as affordable work space

- Challenges:
 - High cost of City real estate poses a major hurdle for start-up businesses
- Project:
 - Growing network of 9 incubators
- Outcome:
 - General Assembly: Attracted \$12 million in venture funding
 - 160 Varick Street: Created more than 300 new jobs
 - E-Space: Hosts more than 100 small food manufacturers



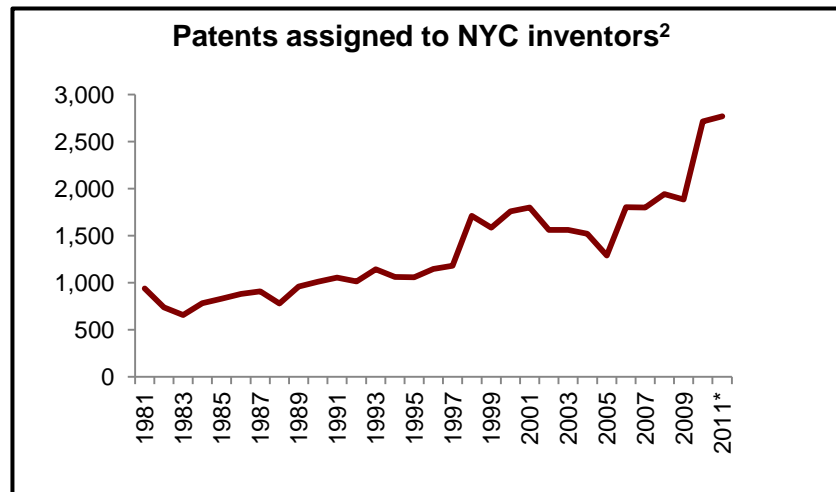
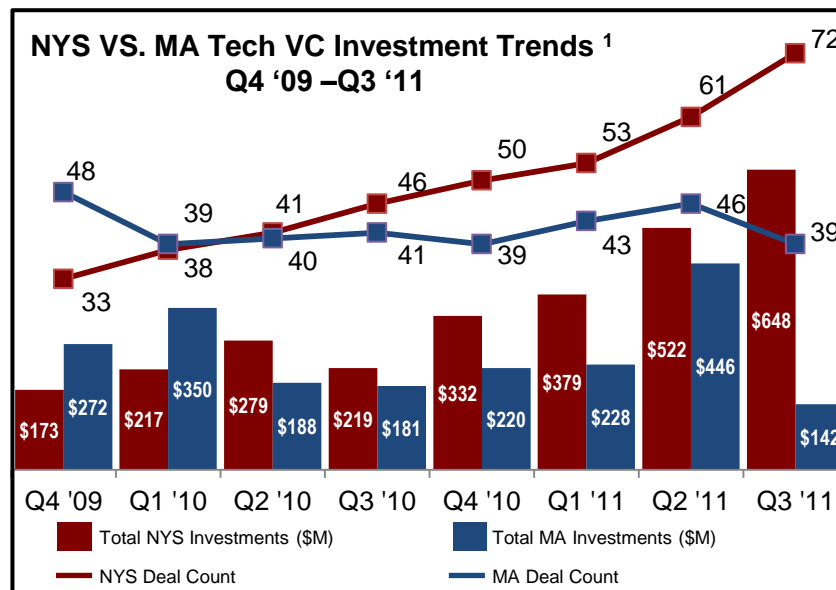
General Assembly



Workstations at 160 Varick St. Incubator

Thanks in part to these initiatives, we've seen substantial changes in the City's technology and innovation sectors.

- Employment in the high tech sector increased by 30% from 2005 to 2010.
- NY now captures an increasingly significant share of venture capital investment, doubling since Q4 '09 and surpassing Massachusetts by ~\$400M in the last 4 quarters¹.
- Research and innovation in NYC has been on a steady rise, demonstrated by a 50% increase in patents secured by NYC inventors over the last decade².



Source: 1. Data from CB Insights, whose tech sector definition includes internet, mobile, software (non-internet/mobile), computer hardware and electronics; 2. USPTO *Forecast for 2011 based on data through 6/28/2011; 3. NYCEDC Analysis

But even with these changes, we know we are still not the world leader in innovation, so we launched an exercise we called “game changers”.

- In this year-long exercise we asked participants to identify a single ambitious initiative that would have a transformative effect on NYC’s economy
- Participants included:
 - 350+ Business & community leaders
 - 12+ University Deans/Presidents
 - Round-tables, workshops, panels
 - Sector analyses of leading industries

- We heard that building our tech capacity is critical to future growth
- And that strong research institutions help create these knowledge jobs

The good news is that we start from a strong position: New York City is home to some of the finest universities in the nation...

■ Regionally:

- NY State is home to 20+ major research centers which attract more than \$6 billion in R&D.

■ Locally:

- Higher education accounts for 115K jobs and \$6.8 billion in payroll.
- 7 institutions classified by the Carnegie Institute as having either “high” or “very high” levels of research activity.
- 9 Academic Medical Centers attract \$1.3 billion in National Institute of Health funding.



Top-tier schools within a 100 mile radius of NYC

But the City remains relatively underweight as a center of applied science and engineering...

Metric	NY Area	Boston Area	SF Bay Area
Size of Economy ¹ (US)	1 st (\$1.47 trillion)	6 th (\$338 billion)	9 th (\$297 billion)
R&D per capita of Top 100 Engineering Programs ²	~\$7.00	~\$87.00	~\$44.00
Science & Engineering as % of Workforce ³ (US)	3.8% (33rd)	7.4% (6th)	6.9% (8th)
Hi-Tech Payroll as % of Economy ³	6%	13%	13%

Sources: ¹PriceWaterhouseCoopers 2008, ²AUTM Survey, 2009 ³US Bureau of Labor Statistics

So we launched a competition in which we offered to partner to build or expand an applied sciences facility in exchange for City resources...

- Capital funding:
 - To assist with infrastructure, build-out, and/or equipment.
- Technical assistance:
 - Development approvals, planning.
 - Applications for governmental (Federal, State) funds.
- Real estate:
 - City-controlled sites offered on favorable terms.

OR

 - Respondents can select a private site.

Governors Island



Goldwater Campus, Roosevelt Island



Naval Hospital Campus, Brooklyn Navy Yard

After successfully testing the market with a RFEI, we released a RFP and received 7 responses from 17 different top-tier institutions.

- In October 2011, EDC received 7 responses:
 - 17 institutions
 - 3 states & 4 countries
 - 4 of top 20 U.S. graduate engineering programs
- Proposals represent a significant investment:
 - Range from 400KSF to 2MSF
 - Up to \$2.5 billion for the full build-out
 - Hundreds of faculty and thousands of graduate students



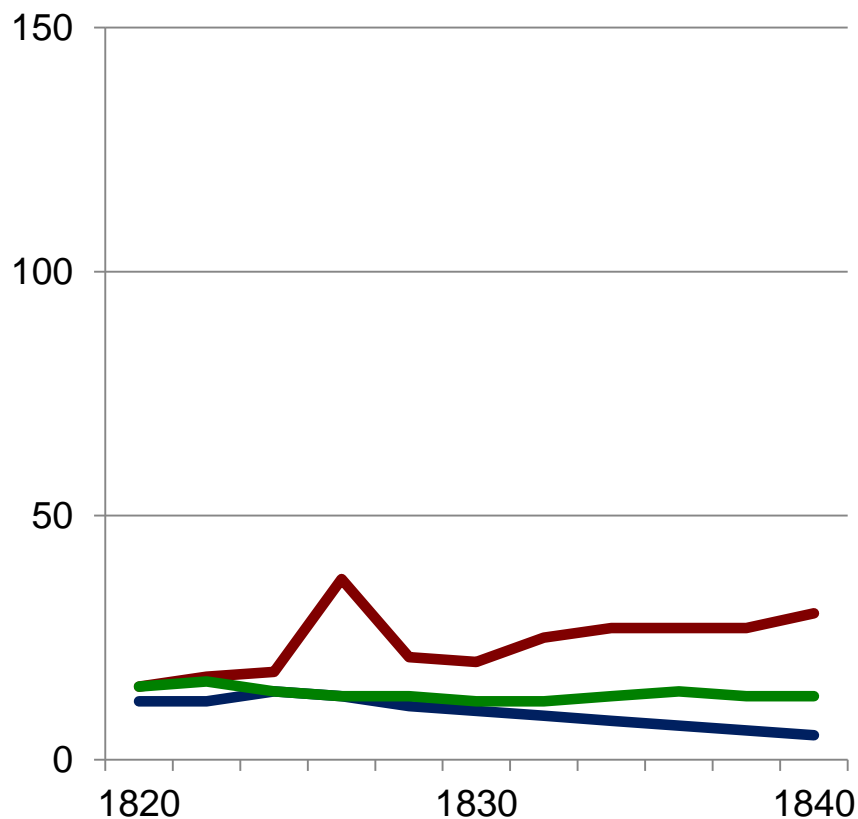
The Applied Sciences facility will impact the City's economy directly and indirectly through construction and operations and its spin-off effect

- Development of an ~1.5MSF facility would create:
 - More than a billion dollars in capital investment on the site
 - Nearly 7,000 construction jobs
- Campus operations:
 - The facility would directly employ hundreds of people at good middle-income wages
- Spin-off effect:
 - Hundreds of new businesses
 - Thousands of new jobs

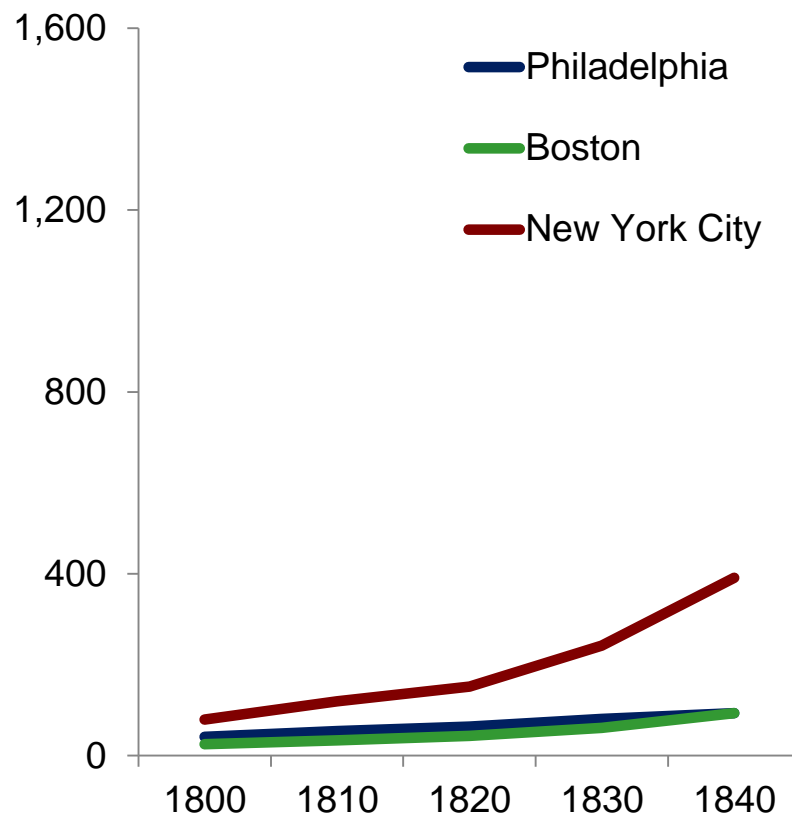


Concluding Parable: In early 1800's NYC was a mid-sized city struggling to distinguish itself from neighboring cities...

Exports from Principal U.S. Ports¹ (1821-1840, Millions)



Population by U.S. City² (1800 – 1840, '000s)



Source: 1. Edward Glaeser: "Urban Colossus: Why is New York America's Largest City?"; 2. Wikipedia

...In the face of derision, New York's Governor, Dewitt Clinton, took on a massive public works project against the odds: the Erie Canal...

- Clinton saw the value in building a canal from NYC to the Great Lakes and the interior of the continent
- Would open the only trade route West of the Appalachians
- Innovative financing through the first US state-private bond issuance



Governor Dewitt Clinton

President Thomas Jefferson himself disparaged the project as “sheer madness,” others called it “Clinton’s Ditch” or “Clinton’s Folly.”

...Thanks to Gov. Clinton's perseverance and vision, the Erie Canal was completed, locking NYC in as the U.S. trading & business capital.

- **1820-1850:**
NYC's population quadrupled in size
- **1860:**
NYC handled 6X more exports than Boston and 25X more exports than Philadelphia

“At the end of the colonial period, Boston, was America's premier port...From 1820 to 1860, NY completely surpassed northern competition in terms of trade.”

– Ed Glaeser, *“Urban Colossus: Why is New York America's Largest City?”*



Erie Canal, opened 1825

*Today, NYC faces another 'Erie Canal moment'.
As in the past, we must ensure that we seize this moment.*