Is the Eiffel Tower “Worth” More Than the Statue of Liberty?

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Is the Eiffel Tower Worth More Than the Statue of Liberty?
INTRODUCTION

Is the Eiffel Tower “Worth” More Than the Statue of Liberty?
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Key Questions

- What is the purpose of the appraisal “assignment”?
- What set of appraisal standards should be applied?
- How do we measure “worth”?
  - Price? If so “highest price” or “typical price” or “most probable price”?
  - Value? If so, what type of “value”??
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- Clarion Experience – Landmarks & Unique/Special Purpose Properties
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- Grand Canyon Village – South Rim
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- Key Question – Assume following purpose of the “assignment”?
  - For current “public owner” for internal use – compare alternatives
  - To generate public support for costs of maintaining or restoring the landmark
  - To understand potential “market value” if put on the market
  - For renegotiation of an existing public/private ownership structure or creation of a new one
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Key Question -- What set of appraisal standards apply and how do they differ?
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- Key Question -- What Type of “Value”?
  - Market Value?
  - Investment Value?
  - Business Value?
  - Going Concern Value?
  - Public Interest Value?
  - Value in Use?
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- Presentation Focus –
  - Difference between “public value” and “market value” and how that affects the assignment and the resulting value conclusion
  - Techniques for analyzing value of “special purpose” iconic publicly owned “landmark” properties
  - How to extrapolate “real estate value” from “business value” or “investment value”
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- Purpose of this presentation – not to come to a definitive conclusion concerning the “value” of the Eiffel Tower & Statue of Liberty but to explore:
  - The steps in the analytical process for analyzing the value of iconic cultural landmarks
  - Key questions that must be answered in any such appraisal assignment
  - Explore some examples of how those questions might be answered
DEFINITIONS OF VALUE

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- Market Value – key elements in most common US/Canada definition
  - Most probable price
  - For “specified property rights”
  - After “reasonable exposure” in a “competitive market”
  - Buyer & seller acting “prudently, knowledgeably, & for self-interest”
  - Neither under “undue duress”
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- Market Value – *International Valuation Standards*

  “the willingness to trade and the *views attributed to market participants* are *‘typical’* of those of buyers and sellers, or prospective buyers and sellers, *active in a market* on the valuation date, *not to those of any particular individual or entity.*” (The Appraisal of Real Estate, 14th Edition, p. 59)
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- Market Value – *Uniform Appraisal Standards for Federal Land Acquisitions* (USA Yellow Book)
  - Amount “in all probability” property would have sold for
  - After “reasonable exposure” on “open, competitive market”
  - Buyer & seller “willing and reasonably knowledgeable”
  - Giving “due consideration to all available economic uses of the property”
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- Public Interest Value – No generally accepted definition
- Not defined in the Dictionary of Real Estate Appraisal
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- Public Interest Value – 14th Edition of *The Appraisal of Real Estate (p. 64)* says the following:

  “Historically, *public interest value* has been used as a general term covering a family of value concepts that relate the highest and best use of property to noneconomic uses. (Other terms for similar concepts include *natural value, intrinsic value, aesthetic value, scenic value, and preservation value.*). The analysis of public interest value tends to be driven by social, political, and public policy goals rather than economic principles.”
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- Public Interest Value is related to “Use Value” and “Going Concern Value”

  Use Value – “In analyzing use value, an appraiser focuses on the value the real estate contributes to the enterprise of which it is a part or the use to which it is devoted, without regard to the highest and best use of the property or the monetary amount that might be realized from its sale.”
  
  *The Appraisal of Real Estate, 14th Ed., p. 62*
ARE THE EIFFEL TOWER & STATUE OF LIBERTY “SPECIAL PURPOSE” PROPERTIES?

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- What is a “special purpose” property?
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Special Purpose Property – “A property with a unique physical design, special construction materials, or a layout that particularly adapts its utility to the use for which it was built; also called a special-design property."

Dictionary of Real Estate Appraisal, 6th Edition
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Characteristics of a special purpose property
- Originally constructed for a specialized use
- Specialized design
- Difficult/expensive to convert to another use
- Limited utility for alternative uses – functional obsolescence
- Few, if any, market transactions involving similar properties
WHAT ARE THE APPROPRIATE APPROACHES TO VALUE FOR “SPECIAL PURPOSE” PROPERTIES?

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- If the Eiffel Tower & the Statue of Liberty are “special purpose” properties
  - Can the sales comparison approach be used?
  - Can the cost approach be used?
  - Can the income approach be used?
The cost approach may be used to develop an opinion of market value (or some other type of value the appraisal assignment may require such as use value or fair value) of proposed construction, special-purpose or specialty properties, and other properties that are not frequently exchanged in the market...
“... Buyers of these properties often measure the price they will pay for an existing building against the cost to build less depreciation or against the cost to purchase an existing structure and make any necessary modifications.” (The Appraisal of Real Estate, 14th Ed., p. 566)
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Can we develop a supportable cost approach for the Eiffel Tower and the Statue of Liberty?
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If the answer is “yes” we can develop a cost approach” then . . .

- Would it be “replacement” cost? “Reproduction” cost? Or a hybrid between the two?
- What information about the Eiffel Tower and the Statue of Liberty do we need?
- How do we measure physical, functional & external (economic) obsolescence?
- How do we determine the value of the underlying land?
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Definition of “reproduction cost”:

“The estimated cost to construct, at current prices as of the effective date of the appraisal, an exact duplicate or replica of the building being appraised...
Definition of “reproduction cost” (continued):

“. . . using the same materials, construction standards, design, layout and quality of workmanship . . .
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○ Definition of “reproduction cost” (continued):
  “. . . and embodying all the deficiencies, superadequacies, and obsolescence of the original building.”

*The Dictionary of Real Estate Appraisal, 6th Edition*
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Definition of “replacement cost”:

“The estimated cost to construct, at current prices as of a specific date, a substitute for a building or other improvements, using modern materials and current standards, design, and layout.”

The Dictionary of Real Estate Appraisal, 6th Edition
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*If the answer is “no” we cannot develop a cost approach” then . . .

What other approach can we use?
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What other approach can we use?

Answer: an Income Approach that separates “business value” or “use value” from “real estate value” based on royalties/concession payments.
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- Height: 324 meters (1,063 feet) high (including antennae)
- Weight: 10,100 “tonnes”
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- Constructed in 26 months by 300 workmen
- Construction cost – 8 million francs or equal to US$1.5 million in 1890
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- 18,038 metallic parts joined together by 2.5 million rivets
- Built of specialty structural “puddled iron”
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- Completed March 31, 1889 for the Paris World’s Fair
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Is it possible to calculate a current “reproduction cost” based on the original 1887 to 1889 construction cost?
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- At 2.5% annual inflation rate & US$1.5 million “cost” in 1890
- Current “construction cost” would be approximately US$33.7 million
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However, adjusting for “old francs” and French inflation since 1890, current “adjusted” construction cost closer to US$40.0 million.

“But, if you look at the original accounting document, you can see that they used a wood scaffolding, and they did not follow the current legislation on safety on worksite, and all that kind of stuff. And the price of steel is different!

We could figure something around 50 and 80 millions euros easily. Quite cheap.”

Key Questions re “cost approach” before considering depreciation:

- Are we determining “reproduction cost” or “replacement cost”? 
- What construction techniques were used in 1889 & how did they affect cost? 
- Were “indirect costs” included in the 1889 cost figures? 
- What would it cost to manufacture “puddled iron” today? 
- Are we trying to cost out an exact “replica”? 
- Is it appropriate to use “replacement cost” for some/all of the construction materials in the cost approach?
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- Are costs to construct replicas of the Eiffel Tower relevant?
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- Tokyo Tower, 1958 – full scale but only 60% of the weight (steel rather than iron)
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- Tokyo Tower, 1958
- Cost: US$8.4 million
- Mortgaged for reported US$30.0 million in 2000
- At 2.5% annual inflation on construction cost would need $37.0 million to build Tokyo Tower in 2017
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- Paris Las Vegas, half-scale
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Others have attempted to calculate current costs to construct a replica of the Eiffel Tower.
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- Other estimates of costs to construct a replica of the Eiffel Tower
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Excerpt

https://www.natgeotv.com/int/pricing-the-priceless
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“Pricing the Priceless” Conclusion

- Steel – not iron (less expensive, stronger, rust resistant)
- Welds rather than rivets
- Fake rivets installed
- US$60.0 million estimate as of 2011 for ½ scale “replica”
- Full size equivalent cost – 8 X $60.0m = $480.0 million
- Does that include indirect costs???
STATUE OF LIBERTY: COST APPROACH IMPROVEMENTS

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- Constructed in 1875 in Paris – cost 2.25m “old” francs or US$250,000
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- Ellis Island 1886 Base Cost – US$100,000
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- Total Statue of Liberty 1885 Construction Costs -- US$350,000 including base

At 2.5% rate of cost increase since 1885, would be $8,850,000

Based on actual change in CPI as shown below: $8,280,000

<table>
<thead>
<tr>
<th></th>
<th>Cost at Time of Construction</th>
<th>2017 CPI</th>
<th>CPI at Time of Construction</th>
<th>Change in CPI</th>
<th>Cost in 2017</th>
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<tbody>
<tr>
<td>Statue:</td>
<td>$250,000</td>
<td>734.2</td>
<td>33</td>
<td>22.2</td>
<td>$5,562,121</td>
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<tr>
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<td>$100,000</td>
<td>734.2</td>
<td>27</td>
<td>27.2</td>
<td>$2,719,259</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>$8,281,380</td>
</tr>
</tbody>
</table>
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Given 1880 as mid-point of 1876 to 1886 construction process including base, current estimated cost likely to be $10,000,000
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- Las Vegas New York Hotel & Casino 2/5 size replica of Statue of Liberty
- Is its construction cost relevant?
"Vegas Liberty is about two-fifths the height of the original (150 feet versus 350 feet), weighs far less (150 tons versus 27,000 tons) and is way younger (about 15 years compared with 127).

It is also made of less stern stuff, mostly carved Styrofoam coated with reinforced fiberglass and exterior drywall, rather than the iron supports and beaten copper of the original."

_The New York Times, April 15, 2011_
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- Other improvements on Liberty (Bedloe) Island
- Must be added to cost of the statue itself
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- Liberty Island originally called Great Oyster Island – part of tidal flats and partially submerged at high tide
- Sold to Isaac Bedloe in 1667
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- 1753 rental ad: “To be Let. Bedloe's Island, alias Love Island, together with the dwelling-house and lighthouse being finely situated for a tavern, where all kinds of garden stuff, poultry, etc., may be easily raised for the shipping outward bound, and from where any quantity of pickled oysters may be transported; it abounds with English rabbits.”

- Plan of Bedloe’s Island in 1772
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- Bedloe Island 1806-1811 – Construction of Fort Wood
- Question: was significant filling and rip-rap and fill work done to the entire island to keep it above high tide?
- If so, at what original cost?
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- Postcard for Liberty (Bedloe) Island sometime between 1930 and 1940.
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“People have lived on Liberty Island for at least 200 years, first when it was a military reservation, and later, to care for Lady Liberty herself. In recent years, the statue’s neighbors have dwindled from a bundle of families to just two people: David Luchsinger, the current superintendent, and his wife, Debbie” NY Times, Oct. 7, 2013
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Improvement Costs Over Time

1937-1941: $1,500,000 budgeted for administration & concession buildings, demolition of army structures, & landscaping

1952-53: $175,000 for six employee housing units & housing courtyards

This image represents post-war planning and dates back to December 4, 1941. Markings on the photograph indicate the location of the newly planned seawall and western pier as well as the location of the riprap on the western side of the island. National Park Service, Statue of Liberty NM.
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National Park Service Mission 66 Funding to finish the 1937 Master Plan

$279,000 for “roads and trails”

$329,000 for “buildings and utilities”
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1984-1986 -- $36.0 million for Statue of Liberty Centennial restoration
2011-2012 -- $27.25 million for updates to elevators and restrooms

2013-2014 – approx. $5.6 million for boat dock demolition & reconstruction & other improvements following Hurricane Sandy
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- New museum is being constructed where former military buildings & residences were located
“On October 7, 2016, construction started on a new Statue of Liberty museum on Liberty Island. The new $70 million, 26,000-square-foot (2,400 m²) museum will be able to accommodate all of the island’s visitors when it opens in 2019, as opposed to the current museum, which only 20% of the island’s visitors can visit. The original torch will be relocated here, and in addition to exhibits relating to the statue’s construction and history, there will be a theater where visitors can watch an aerial view of the statue.”
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- Museum set to open in 2019
- Construction Cost expected to be $70.0 million
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**Total Reproduction Costs in 2017 Dollars Based on Historic Costs**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Statue &amp; Pedestal</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>1937-1941 Master Plan Improvements</td>
<td>$9,800,000</td>
</tr>
<tr>
<td>1953 Housing Construction</td>
<td>$850,000</td>
</tr>
<tr>
<td>Mission 66 Improvements</td>
<td>$2,090,000</td>
</tr>
<tr>
<td>1986 Centennial Restoration</td>
<td>$79,500,000</td>
</tr>
<tr>
<td>2012 Elevator &amp; Restroom Improvements</td>
<td>$30,830,000</td>
</tr>
<tr>
<td>2014 Post Hurricane Sandy Improvements</td>
<td>$6,000,000</td>
</tr>
</tbody>
</table>

- **Subtotal**: $139,070,000

- **Plus: New Museum**: $70,000,000

- **Total Inflation Adjusted Costs rounded to**: $209,070,000
  - Rounded to: $210,000,000
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- Additional Questions When Using Historic Costs Adjusted for Inflation:
  - Is there possible double counting?
  - Demolition of old improvements?
  - What are the additional costs to create the island (land fill, riprap, bulkheads, etc.)?
  - Are all Indirect Costs such as financing costs and “overhead and profit” included?
UNDEPRECIATED REPRODUCTION COST COMPARISON

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- Undepreciated “Reproduction” Costs
  - **Eiffel Tower**: $480,000,000
    based on comparison to Las Vegas
  - **Statue of Liberty**: $210,000,000
    based on historic costs adjusted for inflation
COST APPROACH: DEPRECIATION & OBSOLESCENCE

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How would we estimate appropriate “physical deterioration” deduction on national historic landmarks such as the Eiffel Tower & the Statue of Liberty?

Are past expenditures on restoration & improvements important to an analysis of physical deterioration & functional obsolescence?
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- Total Costs in 2017 Dollars Based on Historic Costs – Statue of Liberty
  - 1937-1941 Master Plan Improvements $ 9,800,000
  - Mission 66 Improvements $ 2,090,000
  - 1986 Centennial Restoration $ 79,500,000
  - 2012 Elevator & Restroom Improvements $ 30,830,000
  - 2014 Post Hurricane Sandy Improvements $ 6,000,000

  **Subtotal** $128,220,000
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- Statue of Liberty
- In 1986, after 100 years of use, NPS spent $79.5 million (2017 dollars) on a total 2017 reproduction cost of $210.0 million (including museum)
- Has been 31 years since 1986 – on straight line basis, the $79.5 million expenditure in 1986 would be 31% depreciated in 2017 (assuming 100 year useful life)
- Appropriate depreciation would be about $24.6 million – based only on 1986 costs

- The 2012-2014 improvements totaled $36.8 million
- Assuming 100 year life of those improvements, total depreciation would be $1,500,000 (approx. 4.0% depreciated) on a straight line basis as of 2017

- Statue of Liberty Physical and Functional Depreciation: $26,100,000
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- **Statue of Liberty**
  - Current depreciated value of 1986 improvements (2017 dollars) $55.0 million
  - Current depreciated value of 2012-2014 improvements $35.0 million
  - **Total** $90.0 million

- Sinking fund calculations to determine appropriate reserve for replacement
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Statue of Liberty

A $90.0 million expenditure in 2017 would require $575,000,000 in 75 years at a 2.5% rate of inflation

A “sinking fund” reserve of $2,675,000 per year would accumulate to $575.0 million in 75 years at a 2.5% growth rate
Eiffel Tower modifications in the 1980s

1982 – original elevators between 2\textsuperscript{nd} & 3\textsuperscript{rd} levels replaced after 97 years in service

1982 – two new emergency staircases installed, replacing the original spiral stairs

1983 – south pillar fitted with an electric Otis elevator to the Jules Verne restaurant

\textbf{1982 TO 1983 WORK – TOTAL COST EST. $38.0 MILLION}


1986 – original lifts in the east and west legs extensively refurbished (cars replaced & new computer system installed)

1986 – small service lift added to the south leg
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2015 Eiffel Tower modifications -- $38.4 million for installation of glass floors on 1st level, electricity producing wind turbines, & updates to the restaurant and gift shop.

January 2017 Announcement – 15-year renovation plan with estimated cost of $321 million – will include updating the elevators, lighting systems and visitor facilities as well as structural reinforcements to protect the tower from terrorist attacks & a see-through surrounding wall.
The January 2017 renovation program over 15 years at a cost of $321.0 million relates to both physical deterioration/depreciation as well as functional obsolescence.

- Equates to 67% of our prior $480.0 million reproduction cost estimate
- Equivalent to $21.4 million per year for 15 years – which equates to 4.5% of reproduction cost per year
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- QUESTION -- CAN NATIONAL HISTORIC LANDMARKS SUCH AS THE EIFFEL TOWER & THE STATUE OF LIBERTY SUFFER FROM ANY TYPE OF EXTERNAL (ECONOMIC) OBSOLESCENCE?
EXTERNAL (ECONOMIC) OBsolescence – “A type of depreciation; a diminution in value caused by negative external influences and generally incurable on the part of the owner, landlord, or tenant. The external influence may be either temporary or permanent.” (The Dictionary of Real Estate Appraisal, 6th Edition)
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- **EXTERNAL (ECONOMIC) OBsolescence** –

  - Was the shut down of the Statue of Liberty following the attack of September 11, 2001, or decline in tourism to Paris in the wake of recent terrorist attacks a form of “external obsolescence“?

  - If so, would the portion of the $321.0 million expenditure announced in Jan 2017 earmarked for structural reinforcements to protect the Eiffel Tower from terrorist attacks be evidence of “external” obsolescence?
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Calculation of Depreciated Value of Improvements

**Eiffel Tower**
- Undepreciated Cost: (2017) $480,000,000
- Less: Depreciation from all Sources $321,000,000
- **EQUALS: DEPRECIATED VALUE BEFORE LAND** $159,000,000

**Statue of Liberty**
- Undepreciated Cost: (2017) $210,000,000
- Less: Depreciation from all Sources $26,000,000
- **EQUALS: DEPRECIATED VALUE BEFORE LAND** $184,000,000
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Land Area – Eiffel Tower
Its base is square, measuring 125 metres (410 ft) on each side.

15,625 sq. meters or 168,000 sq. ft. meters
1.562 hectares or 3.86 acres

Land Area – Liberty Island
Equals 59,558 square meters
14.717 acres or 641,073 sq. ft.
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Key questions issues when analyzing land value under a national historic landmark

- Can the existing improvements be demolished?
- What are the legally permissible uses?
- What zoning, and especially FAR regulations, apply?
- What jurisdiction controls land use approval decisions?
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- What are the land sale comparables to use to estimate the value of an island in New York harbor?
  - Sale prices for other islands?
  - Manhattan waterfront prices?
  - Brooklyn waterfront prices?
  - New Jersey waterfront prices?
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![Graph showing the price per square foot of Manhattan land from 2009 to 2014. The prices range from $377.46 in 2009 to $578.86 in 2014.]

Source: Cushman & Wakefield. Data is for properties being marketed as development sites, and prices are per buildable square foot. Only includes sites south of 96th Street.
“According to Eastern Consolidated’s Hauspurg, a Lower Manhattan site will soon hit the market at $1,400 a [buildable] foot. He said, however, he’s doubtful that there are enough luxury buyers left for that deal to pencil out.”

*The Real Deal, April 1, 2015*
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- "City offers $100M for CitiStorage site on Brooklyn waterfront
  Norman Brodsky rejected the bid, with Massey citing $325M ask"
  The Real Deal, June 10, 2016

Site zoned for 600,000 s.f. of commercial development

Equates to $167 per buildable foot (bid) and $542 per s.f. asking
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- “The Gold Coast of New Jersey has gotten so hot for developers in recent years that in many areas near the waterfront there is hardly any land left to go around.

- The land grab has pushed prices to record levels in some areas as buyers from around the world swoop in and snag the remaining plots. Developers forced to buy land at higher prices are now planning to build condominiums rather than rentals, a relatively new trend for even the most popular areas of Jersey City in Hudson County."

The Real Deal, June 1, 2016
“Last June, Strategic Capital — the investment arm of China Construction America — paid a reported record $55 million, or $121,000 per unit, for the land to build a 37-story luxury condo building at 75 Park Lane in Jersey City.”

The Real Deal, June 1, 2016
But what zoning should we assume for Liberty Island?
- Not even clear legally what jurisdiction it is in. New Jersey? New York?
- What FAR to assume?
  - Existing floor area? With or without museum?
  - Additional floor area?
- Given its “landmark” status, can we even determine a maximum FAR?
“In 1987, US Representative Frank J. Guarini and Gerald McCann, then Mayor of Jersey City, sued New York City, contending that New Jersey should have dominion over Liberty Island because it is on the New Jersey side of the state line. By default—since the court chose not to hear the case—the existing legal status was unchanged. Portions of the island that are above water are part of New York, while riparian rights to all of the submerged land surrounding the statue belong to New Jersey...
. . . A 1997 United States Supreme Court decision involved such riparian rights around nearby Ellis Island. Being mostly constructed of artificial infill, New Jersey argued and the court agreed that the 1834 compact covered only the natural parts of the island, and not the portions added by infill. Thus it was agreed that the parts of the island made of filled land belonged to New Jersey while the original natural part belonged to New York. This proved impractical to administer and New Jersey and New York subsequently agreed to share jurisdiction of the entire island.” (Source: Wikipedia)
Controversy over redevelopment of Governor’s Island is instructive on difficulties of measuring allowable future FAR and land value of Liberty Island.
Is the Eiffel Tower Worth More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

“In 1966, the Island was transferred to the United States Coast Guard. The Island became the Coast Guard's largest installation, with a self-contained residential community of approximately 3,000 and a commuting population of another 1500. Under the Coast Guard, the Island was the home of the Atlantic Area Command, the Maintenance and Logistics Command, and the Captain of the Port of New York.”
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Governors Island
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Governors Island Master Plan
Determining Eiffel Tower land value is even more complicated since the Eiffel Tower is in a public park.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Alternative approach to land value for either Statue of Liberty or Eiffel Tower—ground rent capitalization
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Ground leases -- hotels, restaurants, branch banks, gas stations/convenience stores, airports, etc.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Ground Leases Currently for Sale and Lease

Welcome to the LoopNet.com Ground Lease for Sale page. Browse our inventory of current Ground Lease properties available for sale and lease on the leading commercial real estate marketplace.

Below are over 500 Ground Lease properties out of nearly 800,000 total properties available on LoopNet.com. For more search options, use...
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Ground leases – structured as percentage of gross revenues generated by the business operated on the land

- So appropriate ground lease rate is intimately related to the Income Approach to value and to the type/value of the improvements on the land
Uniform Appraisal Standards for Federal Land Acquisition
(The Yellow Book) -- “In using the income capitalization approach, care should be taken to consider only income that the property itself will produce – not income produced from a business enterprise conducted on the property. When the public requires the land upon which a business is located, the business is not taken and the value estimate developed by the appraiser should include no incremental value for loss of the business or its profits. . .
Uniform Appraisal Standards for Federal Land Acquisition (The Yellow Book) (continued) -- “. . .It is not improper, however, to consider the uses to which a property can be put, including the character and extent of the business carried on, as distinguished from the profits from that business, the facilities for doing the business, and location of the property as a point commanding trade from the surrounding area, or otherwise. Therefore, when valuing property that typically sells on the basis of income production, it is appropriate to consider the amount of business conducted on the site. . .
Uniform Appraisal Standards for Federal Land Acquisition (The Yellow Book) (continued) — “…Also, of course, many commercial properties will be rented based on a percentage of the gross sales of the business located on the property. In these situations, business volumes may be considered but with the sole reference to the market value of the land.”
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- “Concession fees” paid to the U.S Department of the Interior at American national parks & monuments – including the Statue of Liberty -- are also based on a percentage of the “business” conducted at the national park or monument
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- So value of the underlying land – as well as the value of any existing improvement that might be involved in a sale or determination of “public value” or “market value” – is intimately connected to the business conducted at the national historic landmark.

- And therefore intimately connected to the Income Approach to value.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

So to understand the land value we first must determine the capitalized value of the entire property based on the “royalty” generated and then separately consider the land and improvement components of that value.
EIFFEL TOWER: INCOME APPROACH

Is the Eiffel Tower “Worth” More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Eiffel’s “permit” to build/operate allowed him to keep all income from commercial exploitation of the tower for 20 years – then it was to revert to City of Paris which would demolish it.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Eiffel Tower Visitor Levels
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Eiffel Tower Visitor Levels
Is the Eiffel Tower Worth More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Council of Paris owns the Eiffel Tower
- 2005 – Council retains Societe d’Exploitation de la Tour Eiffel (SETE) to manage & operate the site
- SETE keeps all revenues (except TDF antenna) but pays a “royalty” (percentage rent) to the Council of Paris
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Created in 2005, SETE was elected by the Paris City Council to maintain and run the Eiffel Tower. With almost 7 million visitors to the Tower each year, SETE’s aim is primarily to modernise its facilities, reception areas and the services offered to visitors, while following an approach in line with sustainable development and ensuring the maintenance of a high level of security.

A PUBLIC SERVICE AUTHORITY FOR TEN YEARS

An agreement, signed with the city of Paris, defined SETE’s various tasks, within the framework of its public service authority status, until 2015:

- Look after and maintain the monument and its facilities,
- Monitor the quality of services and security of visitors,
- Improve reception standards, access to the structure and management of the flow of tours,
- Draft a plan for the renewal and modernisation of areas and facilities,
- Develop activities adding to the reputation, prestige and tourist and cultural activities of Paris,
- Promote use of the Tower’s image.

SETE’s mandate extends to the assets placed at its disposal by the city of Paris:

- The entire monument, except for its TDF antennae,
- The quadrangle on the ground and adjoining premises,
- The Tower’s lifts and all the facilities and equipment it contains,
- Rights relating to intellectual, commercial and industrial property,
- Archives and operating assets.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Most Visited Paid Entry 1st

7 Millions Visitors

Foreign 80%

€3.17
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Jules Verne Restaurant & Observation Decks
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Gift shop, 300 seat events space, snack buffet & champagne bar
Is the Eiffel Tower Worth More Than the Statue of Liberty?

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Concession Payment</th>
<th>Operating Income</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>€ 21,070,000</td>
<td>€ 83,950,000</td>
<td>25%</td>
</tr>
<tr>
<td>2014</td>
<td>€ 27,000,000</td>
<td>€ 96,000,000</td>
<td>28%</td>
</tr>
<tr>
<td>2013</td>
<td>€ 10,800,000</td>
<td>€ 73,900,000</td>
<td>15%</td>
</tr>
<tr>
<td>2012</td>
<td>€ 9,600,000</td>
<td>€ 66,500,000</td>
<td>14%</td>
</tr>
<tr>
<td>2011</td>
<td>€ 11,700,000</td>
<td>€ 74,300,000</td>
<td>16%</td>
</tr>
<tr>
<td>2010</td>
<td>€ 9,400,000</td>
<td>€ 68,000,000</td>
<td>14%</td>
</tr>
<tr>
<td>2009</td>
<td>€ 8,500,000</td>
<td>€ 65,700,000</td>
<td>13%</td>
</tr>
<tr>
<td>2008</td>
<td>€ 9,000,000</td>
<td>€ 63,900,000</td>
<td>14%</td>
</tr>
<tr>
<td>2007</td>
<td>€ 8,100,000</td>
<td>€ 59,800,000</td>
<td>14%</td>
</tr>
<tr>
<td>2006</td>
<td>€ 7,489,990</td>
<td>€ 56,471,742</td>
<td>13%</td>
</tr>
<tr>
<td>Avg.</td>
<td>€ 12,265,999</td>
<td>€ 70,862,174</td>
<td>17%</td>
</tr>
</tbody>
</table>
Is the Eiffel Tower Worth More Than the Statue of Liberty?

But the SETE concession deal is not “triple net”

Council of Paris reportedly pays €13.7 million per year on “maintenance”

(Source: www.curbed.com/2017/1/18/14304/eiffel-tower-renovation-improvements)

and also pays for the major renovations & improvements
Is the Eiffel Tower Worth More Than the Statue of Liberty?

2017 Income Approach – Value to Council of Paris

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Exchange Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royalty Revenues (25% of €90.0m Gross)</td>
<td>€22,500,000</td>
<td>$24,525,000</td>
</tr>
<tr>
<td>Less: Management Expenses (7.0%)</td>
<td>€1,575,000</td>
<td>$1,715,000</td>
</tr>
<tr>
<td>Less: Annual Maintenance</td>
<td>€13,700,000</td>
<td>$14,900,000</td>
</tr>
<tr>
<td>Less: Reserve for Replacement (5.0%)</td>
<td>€1,125,000</td>
<td>$1,225,000</td>
</tr>
<tr>
<td><strong>Net to Council of Paris</strong></td>
<td>€6,100,000</td>
<td>$6,685,000</td>
</tr>
</tbody>
</table>
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Is a 5.0% reserve for replacement sufficient for the Eiffel Tower?

1982-83 costs: $38.0 million equals $88.0 million in 2017 at 2.5% inflation

2017 costs: $321.0 million

Total: $400.0 million
Is the Eiffel Tower Worth More Than the Statue of Liberty?

At a 2.5% rate of return, an annual reserve for replacement of $1,125,000 would grow to $112,000,000 in 50 years and almost $250,000,000 in 75 years.

Compare that to the $321.0 million expenditure announced in January of 2017.
A $320.0 million expenditure in 2017 would require $2,500,000,00 in 75 years at a 2.5% rate of inflation

A “sinking fund” reserve of $11.5 million per year would accumulate to $2.5 billion in 75 years

A reserve of $11.5 million annually would be 45% of gross royalty revenues

Using $11,500,000 as an annual reserve for replacement would result in negative net income of about ($3,590,000) to the Council of Paris
Is the Eiffel Tower Worth More Than the Statue of Liberty?

But is it appropriate to include a “reserve for replacement” when estimating the value of publicly owned iconic landmarks like the Eiffel Tower?

Query: What is the purpose of a “reserve for replacement”? 

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“Market participants may view replacement allowances differently from market to market – e.g., accounting for replacement allowance as a line item or implicitly the capitalization or discount rate. **Appraisers must deal with replacement allowances in a manner that is consistent with the method used in the relevant market for comparable properties.**” *The Appraisal of Real Estate, 14th Edition, p. 454.*
Is the Eiffel Tower Worth More Than the Statue of Liberty?

2017 Income Approach – Value to Council of Paris

What is the appropriate capitalization rate?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

French 10-year bond yield falls after first round vote

Source: Bloomberg, Mantu Badkar/FT

Interest Rates in France
(Percent, March 2016)

- Interest rate on Plan Épargne Logement opened between Feb 1st, 2015 and Jan 31st, 2016
- Interest rate on Plan Épargne Logement opened after Feb 1st, 2016
- Interest rate on Livret A

France sovereign yield curve

(Months) 3 6 1 2 3 4 5 6 7 8 9 10 15 20 30 50
(Maturity in years)
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Figure 2: Prime Office Yields and Bond Yields

2017 Income Approach – Value to Council of Paris

- Royalty Revenues (25% of €90.0m Gross) = €22,500,000
- Less: Management Expenses (7.0%) = €1,575,000
- Less: Annual Maintenance = €13,700,000
- Less: Reserve for Replacement (5.0%) = €1,125,000

Net Income to Council of Paris = €6,100,000
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Should net royalty revenue to Council of Paris be capitalized at its 10 year “cost of funds” in 2017?

If so, value calculated as follows:
Net to Council of Paris €6,100,000 @ 1.0% cap rate equals
Value to Council of Paris of €610,000,000
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Should net royalty revenue to Council of Paris be capitalized at its 20 year “cost of funds” in 2017?

If so, value calculated as follows:
Net to Council of Paris €6,100,000 @ 2.0% cap rate equals
Value to Council of Paris of €305,000,000
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Net to Council of Paris €6,100,000 @ 2.0% cap rate equals

Value to Council of Paris of €305,000,000

May 2017 Exchange Rate 1€ = $1.09

Converted to US Dollars = $332,450,000 or $330.0 million
STATUE OF LIBERTY: INCOME APPROACH

Is the Eiffel Tower “Worth” More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Statue of Liberty Visitor Levels
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Statue of Liberty National Park Service Sources of Concession Revenue
  - Ferry service/Statue cruises – pay 21% concession fee
  - Audio tours – included in cruise/ferry ticket
  - Food service & gift shop – pays 17% concession fee
- Statue of Liberty Concession Percentages are higher than most National Park Service concessions
- And are higher than many other unique special purpose property concession fee percentages
Is the Eiffel Tower Worth More Than the Statue of Liberty?

National Park Service concession fees

<table>
<thead>
<tr>
<th>PARK</th>
<th>EXPECTED CONCESSION FEE IN PROSPECTUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denali National Park</td>
<td>14.0%</td>
</tr>
<tr>
<td>Glacier Park Lodging</td>
<td>1.0%</td>
</tr>
<tr>
<td>Grand Canyon South Rim 1</td>
<td>6.0%</td>
</tr>
<tr>
<td>Grand Canyon South Rim 2</td>
<td>9.4%</td>
</tr>
<tr>
<td>White Sands Retail &amp; Food</td>
<td>10.5%</td>
</tr>
<tr>
<td>Yosemite Grocery Retail</td>
<td>3.5%</td>
</tr>
<tr>
<td>Zion Horseback Tours</td>
<td>6.0%</td>
</tr>
<tr>
<td>Bandelier National Monument</td>
<td>15.0%</td>
</tr>
<tr>
<td>Rocky Mountain Retail Store</td>
<td>7.3%</td>
</tr>
<tr>
<td>Glacier Trail Rides</td>
<td>7.0%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>7.97%</strong></td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td><strong>7.15%</strong></td>
</tr>
</tbody>
</table>
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Sports facilities

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFL Baltimore Ravens (2013)</td>
<td>10.0% of ticket sales</td>
</tr>
<tr>
<td>NFL Denver Broncos (2013)</td>
<td>20.0% to 50% of non-NFL events</td>
</tr>
<tr>
<td>MLB Kansas City Royals (2009)</td>
<td>5.0% of ticket sales</td>
</tr>
<tr>
<td>MLB Chicago Cubs Rooftops (2004-2013)</td>
<td>17.0% of revenues</td>
</tr>
<tr>
<td>NHL Chicago Blackhawks (1994-2019)</td>
<td>10.0% of ticket sales</td>
</tr>
</tbody>
</table>
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Airport retail concessions

<table>
<thead>
<tr>
<th>AIRPORT</th>
<th>RETAIL SALES CONCESSION RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia (2014)</td>
<td>14.6%</td>
</tr>
<tr>
<td>LaGuardia (2014)</td>
<td>13.7%</td>
</tr>
<tr>
<td>SEATAC (2013)</td>
<td>13.9%</td>
</tr>
<tr>
<td>Orlando (2013)</td>
<td>19.3%</td>
</tr>
<tr>
<td>Bush – Houston (2013)</td>
<td>10.0%</td>
</tr>
<tr>
<td>Sky Harbor Phoenix (2013)</td>
<td>14.3%</td>
</tr>
<tr>
<td>McCarran Las Vegas (2013)</td>
<td>15.6%</td>
</tr>
<tr>
<td>Denver International (2013)</td>
<td>13.4%</td>
</tr>
<tr>
<td>Hartsfield Atlanta (2012)</td>
<td>16.2%</td>
</tr>
<tr>
<td>2012 to 2014 Average of 12 Leases</td>
<td>14.0%</td>
</tr>
<tr>
<td>Median</td>
<td>14.5%</td>
</tr>
</tbody>
</table>
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Statue of Liberty
National Park Service

2015 Concession Revenues were
$17,445,000
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Given our prior calculation, is a $915,000 per year reserve for replacement sufficient?

A $90.0 million expenditure in 2017 would require $575,000,000 in 75 years at a 2.5% rate of inflation.

A “sinking fund” reserve of $2,675,000 per year would accumulate to $575.0 million in 75 years at a 2.5% growth rate.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Based on a “typical” governmental entity management fee of 7.0% of gross revenues and excluding NPS operating costs & with appropriate reserve for replacement.

2017 Income Approach – Value to National Park Service

- Concession Fees (2015 Inflated) $18,300,000
- Less: Management Expenses (7.0%) $ 1,280,000
- Less: Reserve for Replacement (5.0%) $ 2,675,000
- Net Income to National Park Service $14,345,000
Is the Eiffel Tower Worth More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Spreads between US Treasuries & hotel/retail cap rates

Retail

![Graph showing US Cap Rate Average vs. 10-Year Treasury Yield](image-url)

Source: SNL Financial, FactSet, RCA
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Spreads between US Treasuries & hotel/retail cap rates

Hotel
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Should net royalty revenue to National Park Service be capitalized at federal government 20 year “cost of funds” in 2017?

If so, value calculated as follows:

Net to National Park Service $14,345,000 @ 2.7% cap rate equals

Value to National Park Service of $531,295,000 rounded to $530.0 million
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Income Approach – Public Value Comparison

Eiffel Tower  $330,000,000
Statue of Liberty  $530,000,000
THE INCOME APPROACH: ADDITIONAL QUESTIONS

Is the Eiffel Tower “Worth” More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Have we accounted for all of the expenses related to the net income to the Council of Paris and the National Park Service?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Who pays to protect the Eiffel Tower from terrorist attacks?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

“In France, are soldiers outside the Eiffel Tower and the Louvre really worth it?”

Washington Post, 6/4/16
PARIS — “They are known as ‘Operation Sentinel,’ the imposing soldiers in camouflage uniforms who patrol beneath the Eiffel Tower and outside the Louvre with FAMAS assault rifles.

Together, they form a massive security operation of some 10,000 French soldiers deployed immediately after the attacks on the editorial offices of Charlie Hebdo in January 2015 and again after the terrorist attacks last November, which left 130 dead across Paris.

Sentinel represents a watershed development in French military operations. For the first time since the end of the Cold War, the number of French army soldiers actively deployed in metropolitan France roughly equals that of overseas operations.”

Washington Post, 6/4/16
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Cost of Operation Sentinel estimated at €1.04 million per day
- Defense Ministry has allocated 10% of active-duty personnel to protect “sensible ‘points’ throughout the country, although mostly in Paris

- Washington Post, 6/4/16
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- **Statue of Liberty**

What are the National Park Service expenses related to "management" of the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

The National Park Service rangers patrol Liberty Island and provide interpretation on the island and on the ferries – so the concession deal is not “triple net” to NPS.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Statue of Liberty

What are the National Park Service expenses related to “management” of the Statue of Liberty?

“Statue Cruises announces that National Park Service Rangers are now on board their daily harbor tours. As a new initiative, that started on January 13, 2013, the well-trained rangers will be on-deck and on-hand to lend their valuable expertise to passengers.

Designed to enhance the educational aspect of the experience, the rangers will personally engage with passengers by assisting with inquiries and sharing their expert knowledge.”
Is the Eiffel Tower Worth More Than the Statue of Liberty?

**Statue of Liberty**

What are the National Park Service expenses related to “management” of the Statue of Liberty?

During the 2013 federal government shutdown, *New York State* paid the NPS $61,000 per day to keep both the Statue of Liberty and Ellis Island open for tourism.

Annualized that equals $22.25 million
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Deducting $22.25 million from concession fees revenues gives the NPS a negative net income at Statue of Liberty.

### 2017 Income Approach – Value to National Park Service

- **Concession Fees (2015 Inflated):** $18,300,000
- **Less: Management Expenses ($61,000 per day):** $22,250,000
- **Less: Reserve for Replacement (5.0%):** $915,000

**Net Income to National Park Service:** $(4,865,000)
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Statue of Liberty

Should National Park Service expenses related to “management” of the Statue of Liberty be deducted from income?

Or are they equivalent to a “business expense” that should only be considered in light of all “indirect revenues” (e.g., income tax payments from NYC hotel, restaurants, etc.?)
DERIVING LAND VALUE FROM THE INCOME APPROACH

Is the Eiffel Tower “Worth” More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Sources of US royalty/concession fee information:
  - National Park Service concession fees
  - Sports facilities
  - Airport percentage rents
  - Hotel percentage leases
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Hotel ground lease percentage rates
  - Ground leases for hotel development have a lower percentage rent than for National Park concessions or for sports facilities or for airports
  - Average of 8 hotel ground leases reviewed by Clarion Associates – 4.8%
Is the Eiffel Tower Worth More Than the Statue of Liberty?

The Public Value Income Approach conclusions include both the value of the improvements and the value of the underlying land.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Eiffel Tower Gross Revenues -- €90,000,000
  Ground Lease Rent (5% of €90.0m Gross) € 4,500,000
  Less: Management Expenses (7.0%) € 315,000
  Net Ground Lease Allocation € 4,185,000

Capitalized Public Land Value @ 2.0% cap rate €209,250,000
Is the Eiffel Tower Worth More Than the Statue of Liberty?

May 2017 Exchange Rate €1 = $1.09

Eiffel Tower Land Value
Converted to US Dollars = $228,000,000
Is the Eiffel Tower Worth More Than the Statue of Liberty?

2017 Income Approach – Value to National Park Service

Concession Fees (2015 Inflated to 2017) $18,300,000
Weighted Concession Rate is 19.4%
Imputed Gross Revenues $94,330,000

Ground Lease Rent (5% of Gross) $4,715,000
Less: Management Expenses (7.0% of Rent) $330,000
Net Land Rent to National Park Service $4,385,000

Statue of Liberty Land Value at 2.7% Cap Rate $162,400,000 rounded to $162,500,000
Is the Eiffel Tower Worth More Than the Statue of Liberty?

2017 Income Approach – Public Land Value to National Park Service

Statue of Liberty Land Value at 2.7% Cap Rate
$162,500,000 rounded to $160,000,000
Is the Eiffel Tower “Worth” More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Calculation of Depreciated Value of Improvements

**Eiffel Tower**  
Undepreciated Cost: (2017) $480,000,000  
Less: Depreciation from all Sources $321,000,000  
EQUALS: DEPRECIATED VALUE BEFORE LAND $159,000,000

**Statue of Liberty**  
Undepreciated Cost: (2017) $210,000,000  
Less: Depreciation from all Sources $26,000,000  
EQUALS: DEPRECIATED VALUE BEFORE LAND $184,000,000
## Is the Eiffel Tower Worth More Than the Statue of Liberty?

<table>
<thead>
<tr>
<th></th>
<th>Eiffel Tower Depreciated Reproduction Cost</th>
<th>$159,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plus: Land Value</td>
<td>$230,000,000</td>
</tr>
<tr>
<td><strong>Value by Cost Approach</strong></td>
<td></td>
<td><strong>$389,000,000</strong></td>
</tr>
<tr>
<td></td>
<td>Statue of Liberty Depreciated Reproduction Cost</td>
<td>$184,000,000</td>
</tr>
<tr>
<td></td>
<td>Plus: Land Value</td>
<td>$160,000,000</td>
</tr>
<tr>
<td><strong>Value by Cost Approach</strong></td>
<td></td>
<td><strong>$364,000,000</strong></td>
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<td>--------------------------</td>
<td>----------------</td>
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</tr>
<tr>
<td><strong>Eiffel Tower Cost Approach</strong></td>
<td>$ 389,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>Eiffel Tower Income Approach</strong></td>
<td>$ 330,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>Statue of Liberty Cost Approach</strong></td>
<td>$ 364,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>Statue of Liberty Income Approach</strong></td>
<td>$ 530,000,000</td>
<td></td>
</tr>
</tbody>
</table>
Is the Eiffel Tower Worth More Than the Statue of Liberty?

What questions are raised by the fact that the Statue of Liberty Income Approach result is substantially higher than Cost Approach?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Have we included an appropriate reserve for replacement in an Income Approach on a publicly owned landmark?
- Have we considered all expenses to the public authority?
- Should our cap rate be adjusted upward to account for the risk of terror attacks on national landmarks?
- Have we properly accounted for physical deterioration & functional/external obsolescence in the Cost Approach?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Is it even appropriate to include a “reserve for replacement” in the Income Approach on a publicly owned landmark since future restorations/improvements come from general taxation sources rather than income generated by the property?
PUBLIC VALUE:
ADDITIONAL QUESTIONS

Is the Eiffel Tower “Worth” More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- What about “indirect income” to public authorities generated by the Eiffel Tower and the Statue of Liberty?
- How does that affect “public value”?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Types of “indirect income” to public authorities:
  - Economic multiplier effect
  - Sales tax & income tax revenues
  - Licenses and fees
  - Impact on adjacent real estate values due to views of the iconic landmark?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- What is the value of a view of the Eiffel Tower and the Statue of Liberty?
- How does that affect “public value”?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

What is the value of a view of the Eiffel Tower?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- On-line search of six hotels advertising “Eiffel Tower View Rooms”
- Premium for view room of same type as non-view room ranged from 8% to 77% with a median of 22%
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Types of “indirect income” to public authorities:

  Liberty Island National Park has a major impact on the New York State economy. According to a 2012 annual report by the National Park Service, 3.7 million people visited Liberty Island in 2011, generating $174 million in economic activity and supporting 2,218 jobs. Every visitor spends an average of about $35 for the ferry, food and souvenirs at Liberty Island and Ellis Island. Additional expenditures outside the park are estimated to be as high as $100 with each visit. The park generates more than $15 million in revenue from concessioner and franchise fees for the federal government, as well as $3.2 million in license fees to New York City parks plus sales taxes.

Is the Eiffel Tower Worth More Than the Statue of Liberty?

The 3.7 million visitors to Liberty Island in 2011 generated $174.0 million in economic activity.

# Is the Eiffel Tower Worth More Than the Statue of Liberty?

## Tourism

**Economic Impact of Tourism on New York City's Economy**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Direct Spending (dollars in billions)</th>
<th>Total NYC jobs supported by Visitors</th>
<th>Total Wages Generated (dollars in billions)</th>
<th>Total Taxes Generated (dollars in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>$41.4</td>
<td>359,000</td>
<td>$21.0</td>
<td>9.7</td>
</tr>
<tr>
<td>2013</td>
<td>$38.8</td>
<td>348,200</td>
<td>$20.6</td>
<td>9.3</td>
</tr>
<tr>
<td>2012</td>
<td>$35.9</td>
<td>339,305</td>
<td>$19.7</td>
<td>9.3</td>
</tr>
<tr>
<td>2011</td>
<td>$34.5</td>
<td>324,606</td>
<td>$18.6</td>
<td>8.7</td>
</tr>
<tr>
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<td>$31.5</td>
<td>310,156</td>
<td>$17.3</td>
<td>8.1</td>
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<td>2009</td>
<td>$28.2</td>
<td>303,649</td>
<td>$16.6</td>
<td>7.5</td>
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<td>313,997</td>
<td>$17.2</td>
<td>8.3</td>
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<td>2006</td>
<td>$26.2</td>
<td>368,179</td>
<td>$16.0</td>
<td>6.2</td>
</tr>
<tr>
<td>2005</td>
<td>$24.3</td>
<td>333,158</td>
<td>$14.2</td>
<td>5.4</td>
</tr>
<tr>
<td>2004</td>
<td>$21.3</td>
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<td>$12.9</td>
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<tr>
<td>2003</td>
<td>$18.5</td>
<td>391,977</td>
<td>$11.6</td>
<td>4.9</td>
</tr>
</tbody>
</table>

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*View Additional NYC Data for Tourism: Domestic and International Visitors*  
*New York City Hotel Market*  
*International Visitors to New York City By Major Countries and Regions*  
*Return to Tourism Section*  

Source:
Is the Eiffel Tower Worth More Than the Statue of Liberty?

“In 2014, New York City welcomed 56.4 million visitors, an all-time high. International visitors comprised 12.2 million of the total, but their economic importance to the City outweighs their numbers because they stay longer and spend more money than domestic visitors. New York City attracts almost one-third of all foreign visitors to the United States. Visitors to New York City spent more than $41 billion while staying here, generating an economic impact totaling more than $61 billion.”

http://www.baruch.cuny.edu/nycdata/tourism/
Is the Eiffel Tower Worth More Than the Statue of Liberty?

That $61 billion in tourism economic activity in New York City in 2014 generated more than $10.0 billion in taxes. Given the $174.0 million in 2011 economic activity generated by the Statue of Liberty, the Statue would have generated about $28.5 million in taxes.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

2017 Income Approach – Additional Public Value

Tax Revenues (2011 Inflated to 2017) $33,500,000

Less: Management Expenses (7.0%) $2,345,000

Net Tax Revenues $31,155,000

Additional Public Value at 2.7% Cap Rate $1,154,000,000 rounded to $1.15 billion
Is the Eiffel Tower Worth More Than the Statue of Liberty?

The Telegraph

Eiffel Tower worth £344 billion to French economy - or six Towers of London

The Eiffel Tower has been declared the most valuable monument in Europe - worth £344 billion euros (£343 billion) to the French economy, a new study claims.

The study by Italy’s Monza and Brianza Chamber of Commerce based its findings on a monument’s “image, brand and visibility”, calculated by cross-referencing 10 different parameters from various analysts and statistic bodies.

Criteria included a “tourist index”, which took into account “the economic value of the location, the fame of the monument, the flux of visitors to the territory and monument” and an “economic attractiveness index”, comprising factors such as the number of jobs it created and its export value.

The huge value of the “Iron Lady” – as the 1,050ft tall edifice is affectionately known, amounts to almost a fifth of France’s entire annual gross domestic product, Le Figaro pointed out.
MARKET VALUE:
ADDITIONAL QUESTIONS

Is the Eiffel Tower “Worth” More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- If the Council of Paris and the National Park Service “sold” the Eiffel Tower and the Statue of Liberty, what would be their market value?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Key Questions & Issues in Determining Market Value

- Can revenues be increased significantly?
- Would expenses be lower?
- Would the current royalty/concession payments be considered “net operating income”?
- What about the maintenance costs and operating expenses currently paid for by the Council of Paris & the NPS?
- In the absence of public subsidies, what should be the appropriate annual reserve for replacement?
- Would the private sector cap rate be higher than the public sector cap rate?
Are there opportunities to increase revenues if the two landmarks were sold to private operators?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

More visitors?
Higher visitor fees?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Statue of Liberty Ferry & Admission $18.50
- September 11\textsuperscript{th} Memorial $24.00
- Museum of Modern Art $25.00
- NBC Rockefeller Center Studio Tour $33.00
- September 11\textsuperscript{th} Memorial & 60 Min. Tour $44.00
- Empire State Building $54.00
- Yankee Stadium Average Ticket Price $61.00
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Hotel rooms?

Residences?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Copyright and trademark/licensing/image rights?
“Statue of Liberty was originally sculpted by Fredric August Bartholdi and copyright registration number 9939-G was issued to it in year 1876. Currently in US, the default term of copyright is life of the author plus 70 years while the sculptor died in year 1904, therefore, according to my understanding, the Statue of Liberty is in public domain. Besides, work published or registered before year 1923 is in public domain due to copyright expiration.”

Is the Eiffel Tower Worth More Than the Statue of Liberty?

Trademark (image) licensing/sponsorship & advertising rights?
Is the Eiffel Tower Worth More Than the Statue of Liberty?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Citroën paid to use the Eiffel Tower as a billboard between 1925 and 1934.
- Citroën letters required 1.0 million bulbs.
- Guinness Book of World Records included it as the world’s largest billboard.
"Some countries hold their national treasures as specially protected. Stonehenge and other National Heritage locations in the UK, for example, can't be used commercially without permission and payment. The only place you can get a Stonehenge figurine is their gift shop; nowhere else in the country."

“Tourists warned they are breaking the law because taking photos of the Eiffel Tower at night or sharing images on Facebook is ILLEGAL.”

Obscure clause means taking and sharing photos is a copyright violation.

Landmark falls within public domain, so tourists can take photos in the day.

But illuminations are ‘art work’, so reproducing images requires permission.”

- The Daily Mail. Published: 08:03 EDT, 12 November 2014 | Updated: 04:07 EDT, 20 November 2014
- www.dailymail.co.uk/travel
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Naming rights deals

“The record for the highest amount paid for naming rights belongs to Citi Field (opened in 2009) and Barclays Center (opened in 2012), both located in New York City, US. Each garnered deals of $20 million per year for at least 20 years.”

Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Naming rights & licensing/sponsorship deals

“Naming rights to public transit stations have been sold in Las Vegas and Philadelphia (AT&T Station) and Jefferson Station). Such sales have been contemplated in New York and Boston, and ruled out in San Francisco. A sponsorship for the MBTA’s State Street station by Citizens Bank lasted from 1997 to 2000. In Tampa, naming rights for both streetcar stations and rolling stock are available.”

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- Licensing/sponsorship deals – New York Yankees
  - PepsiCo
  - Delta Air Lines – pays more than $1.0 million
  - Audi
  - Canon
  - Master Card
  - Bank of America

Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Naming rights & corporate sponsorship/licensing deals


“The Park Service still won’t recognize donors with advertising or marketing slogans. But for the first time, their logos will get prominent display. Companies will be able to earmark gifts for recurring park expenses, which was prohibited before . . .
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Naming rights deals


“... And a donor will now be allowed to design and build a park building and even operate it long term...
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Naming rights deals


“. . . “You could use Old Faithful to pitch Viagra,” said Jeff Ruch, executive director of Public Employees for Environmental Responsibility, a watchdog group that’s trying to rally the park community to fight the plan. “Or the Lincoln Memorial to plug hemorrhoid cream. Or Victoria’s Secret to plug the Statue of Liberty . . .”
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Naming rights deals

- “... Last year, Jarvis lifted the policy against taking money or advertising support from companies that make alcohol, signing a $2.5 million marketing deal with beermaker Anheuser-Busch it hoped would help draw millennials to the parks. ..."
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Naming rights deals


“... Budweiser kicked off the partnership with a summer music program in the parks, packaged beer bottles in an image of the Statue of Liberty.”
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Barclays Center naming rights deal -- $20.0 million per year
- Barclays Center Google search references: 1,890,000
- Statue of Liberty Google search references: 31,300,000

- Barclays Center holds 18,000 X 250 nights per year = 4,500,000
- Statue of Liberty annual visitors (2016) 4,500,000
Is the Eiffel Tower Worth More Than the Statue of Liberty?

What is the potential Market Value of the Statue of Liberty?
Given current concession revenue of $18,300,000 and a 20% weighted concession fee rate, current gross revenues from “admissions” would be $91,500,000.

Increasing average “admissions” from $18.50 to $44.00, gross revenues would be $215,000,000.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Revenue Theory (cont’d)

Operations revenue and expense figures

- Potential revenue opportunities from the key revenue areas - Proportion of total income (All reporting amusement parks)
  - 32.6% - Total % of income from all three revenue types, made up of:
    - Food & beverage: 19.2%
    - Retail: 7.1%
    - Games: 6.3% (2007 survey 9.8%)**

- Typical revenue and expense ratios:
  - Globally, all in-park revenue* of amusement parks averages from 43% to 49% of the park’s total income
  - Globally, amusement park operations expenses average between 50% and 70% of the park’s total income

* Includes F&B, retail, and games revenue plus tenant/concessions, sponsorships, and other revenue, no parking

Is the Eiffel Tower Worth More Than the Statue of Liberty?

2017 Income Approach – Hypothetical “Market Value” of Statue of Liberty

Gross Revenues: Admissions & Tours $215,000,000
Plus: Annual Licensing Fees $20,000,000
Gross Revenues $235,000,000
Less: Management Fees (6.0%) $14,100,000
Less: Other Operating Expenses (45%) $105,750,000
Less: Reserve for Replacement (5.0%) $11,750,000
Net Operating Income Before Debt Service $103,400,000

Value at 5.0% Cap Rate $2,068,000,000 rounded to $2.1 billion
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Issues in Determining the Public Value of Niagara Falls – Who Owns Niagara Falls?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Issues in Determining the Public Value of Niagara Falls – Who Owns Niagara Falls?

Niagara Falls State Park

With awe-inspiring scenery year-round, thrilling attractions, interactive exhibits, miles of hiking trails, and delectable dining options in a family-friendly environment, Niagara Falls State Park is an adventure-packed experience! No passport is needed to experience an unforgettable and breathtaking Niagara Falls vacation.
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Issues in Determining the Public Value of Niagara Falls – Who Owns Niagara Falls?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Issues in Determining the Public Value of Niagara Falls – Who Owns Niagara Falls?
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Issues in Determining the Public Value of Niagara Falls -- Attractions

THRILL-SEEKERS

Can Now Zipline Over Niagara Falls
Is the Eiffel Tower Worth More Than the Statue of Liberty?

Issues in Determining the Public Value of Niagara Falls -- Hotels
Is the Eiffel Tower Worth More Than the Statue of Liberty?

- Issues in Determining the Public Value of Niagara Falls
Is the Eiffel Tower “Worth” More Than the Statue of Liberty?

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Thank You