

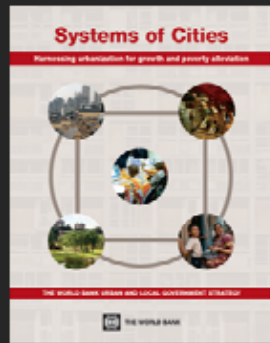
Heritage Economics Workshop  
of the ICOMOS Economics Committee  
May 2011 The World Bank

Spatial Analysis  
for Heritage Economics  
in Historic Cities

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Spatial Analysis  
for Heritage  
Economics in  
Historic Cities  
Chr. Ost

Framework  
Non use values  
Use values and  
Real Estate  
Use values and  
Tourism  
Use values and  
Macroecon.  
Economic  
Landscape  
Djenné  
Typology  
Project  
Conclusions



SYSTEM OF CITIES  
Monitoring Urbanization for Growth  
and Poverty Alleviation  
THE WORLD BANK

equivalent of a 10 percent sales loss for the median manufacturing firm.

The operating scale of urban and metropolitan economies often does not coincide with their physical and administrative boundaries. In many countries, no institutional entity covers the economic footprint of the urban or metropolitan economy. So, decisions on infrastructure investments and its financing are made through complex and inefficient negotiations between central government, often multiple municipalities, regional or state authorities, and the private sector. A critical part of the new urban strategy involves filling this void, with support for both infrastructure decision-making and its financing.

**Fastening cities as gateways.** At the urban and regional level, policies will need to ensure cities to function as gateways to international markets and as facilitating agents for economic production and consumption growth. This cannot be achieved by cities alone. National policy coordination is essential to ensure that cities have good connectivity to roads and other transport infrastructure and to ensure appropriate linkages and connections between cities and their hinterland to provide markets for agricultural goods and services for agribusiness and markets. The World Bank can assist by supporting regional planning and integration, and by providing strategic information about policy options to attract investment from outside the region, as well as related to ongoing coordination efforts that facilitate such linkages.

**Supporting the additional investment climate.** Cities that place a high priority on attracting investment to cities are engaged in the additional investment climate, which focuses on reducing the high cost of doing business. The World Bank has expanded the scope and coverage of subnational business climate Assessments and Doing Business surveys, providing critical information about policy options to attract investment from outside the region. Because the methodologies and indicators are standardized, cities can compare their performance with their peers and establish benchmarks for improvement.

Such data have been used to define appropriate entry points for technical assistance and investments in improving a city's economic prospects. Going forward, the Bank will ensure appropriate linkages of subnational investment climate Assessment and Doing Business data with the design of the next generation of local economic development projects.

**Supporting urban regeneration.** For post-industrial cities in transition, the Bank can assist by supporting urban regeneration and brownfield redevelopment approaches. Jane Jacobs' *The Death and Life of Great American Cities* has become an essential management plan for cities in transition, particularly in Europe.

**Box 6. Cultural heritage assets promote local economic development**

There is a strong link between cultural heritage and economic development. In the case of historic cities, the Bank has provided financial assistance for 214 projects having a direct investment component in heritage conservation activities with a total investment of \$4.6 billion. There are currently 117 projects under implementation, with a total investment of \$1.4 billion in cultural heritage investments.

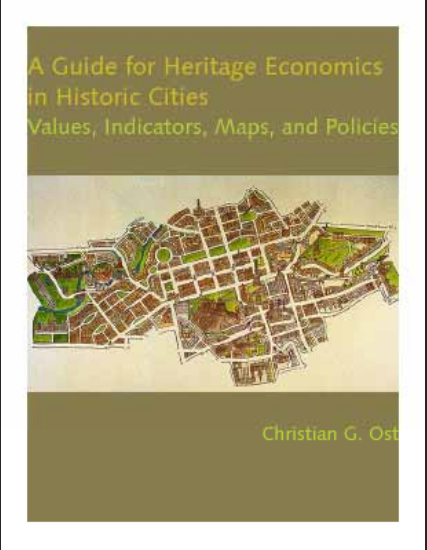

In 2009, the Bank introduced a dedicated Trust Fund for Cultural Heritage—fundraising that had been established in 2007 with a total of \$10.7 million. The first round of fundraising produced 27 grants to allow local authorities to undertake a range of projects and the second round of fundraising attracted additional financial support, including about \$10 million. This assistance has made cultural heritage preservation, in particular, one of the most visible markers of local government efforts to address existing conditions to attract investment and economic development.



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Framework

- Non use values
- Use values and Real Estate
- Use values and Tourism
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- Economic Landscape
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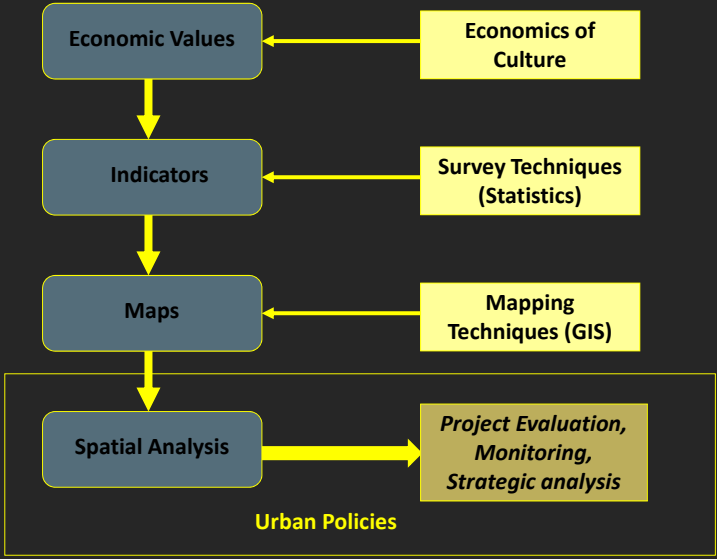



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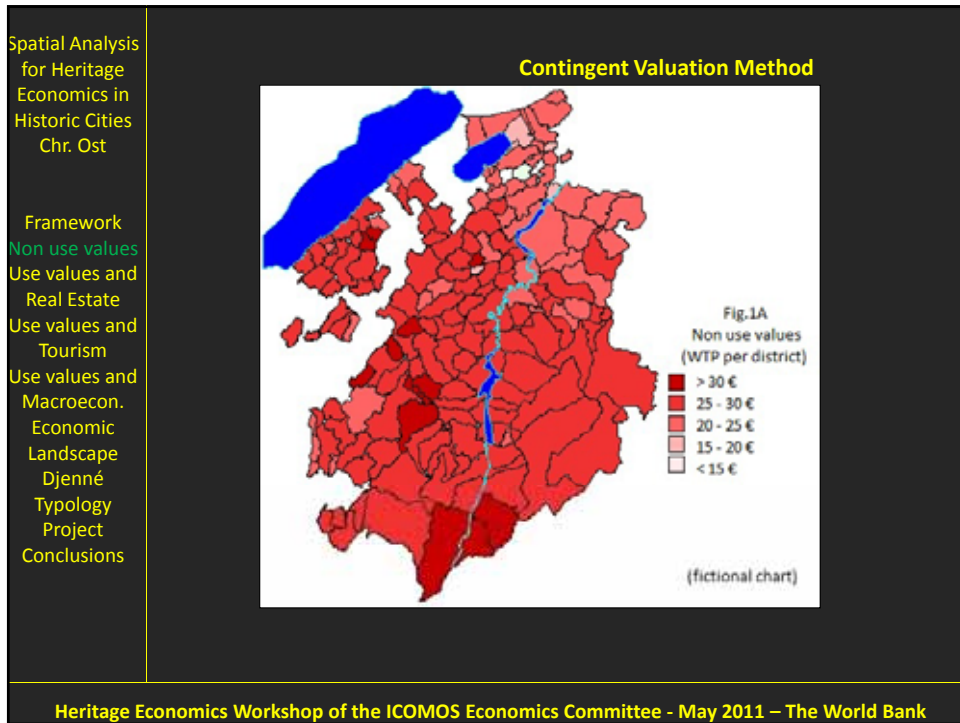
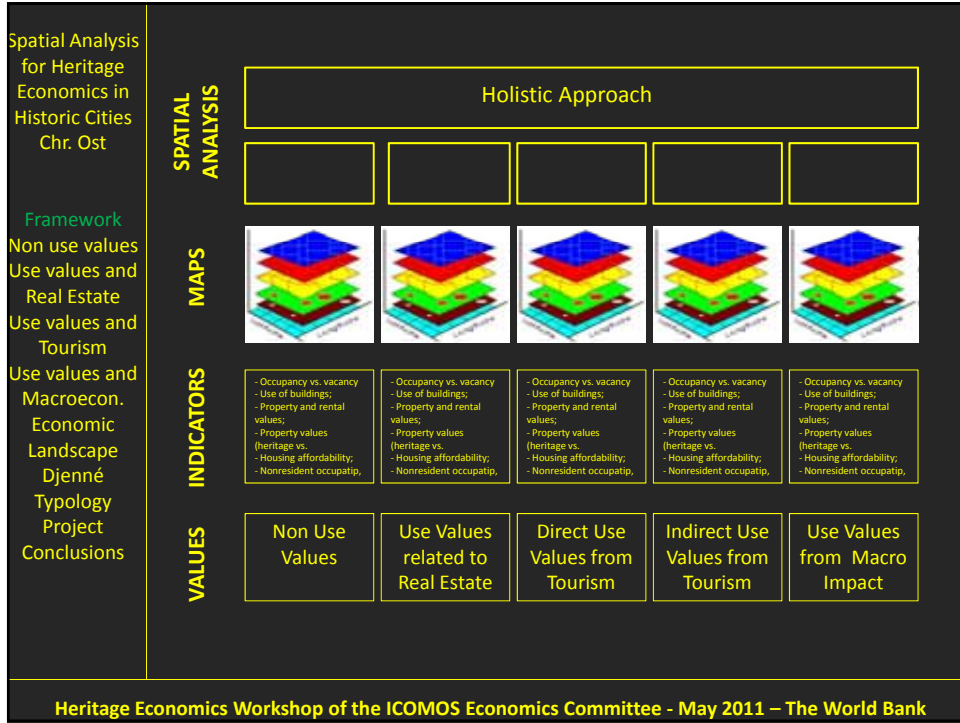
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    graph TD
      EC[Economics of Culture] --> EV[Economic Values]
      ST[Survey Techniques Statistics] --> I[Indicators]
      MT[Mapping Techniques GIS] --> M[Maps]
      EV --> I
      I --> M
      M --> SA[Spatial Analysis]
      SA --> PEMA[Project Evaluation, Monitoring, Strategic analysis]
      PEMA --> UP[Urban Policies]
  
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### Contingent Valuation Method

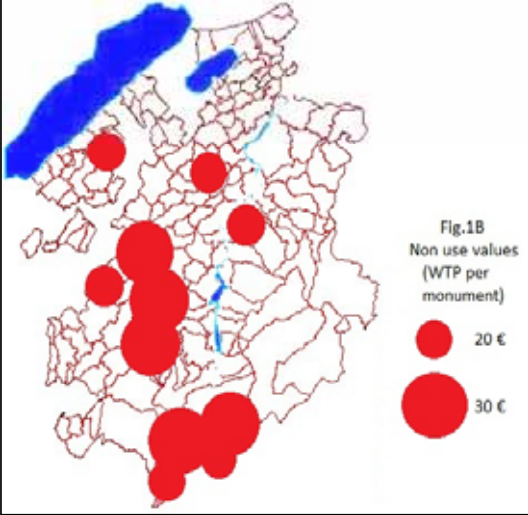


Fig.1B  
Non use values (WTP per monument)

- 20 €
- 30 €

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### Vacancy of buildings

### Property prices

### Conditions of heritage buildings

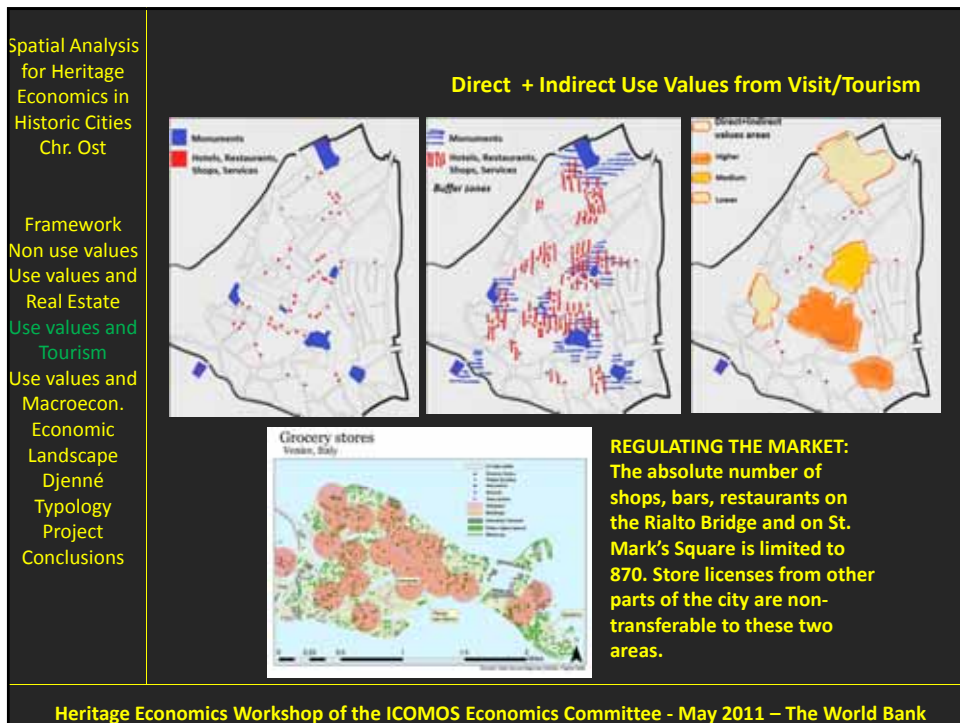
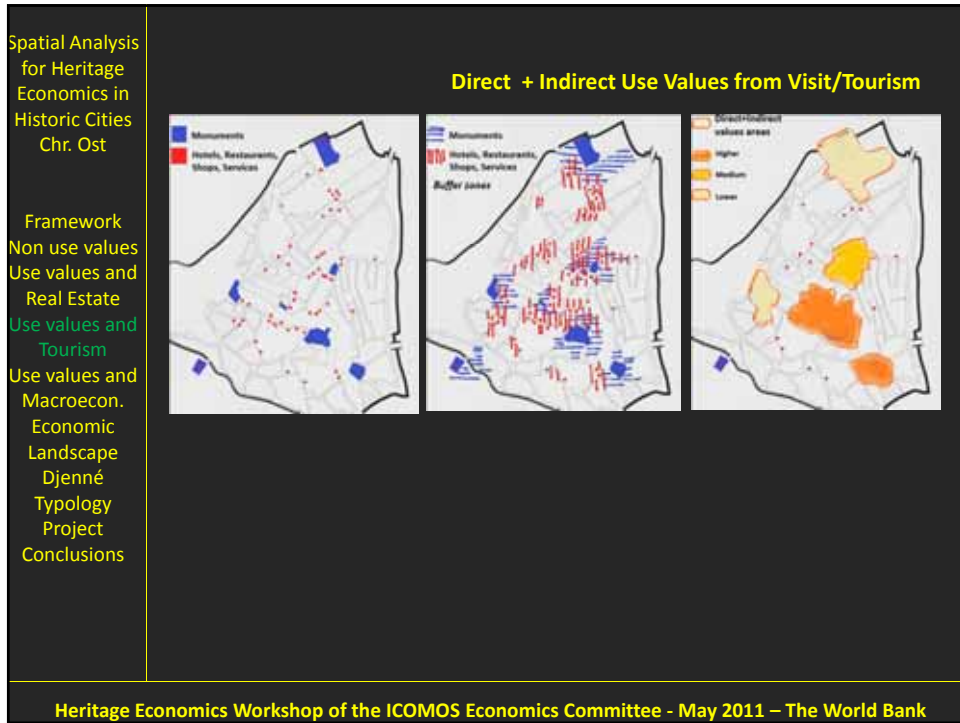


= Lower (real estate) use values  
correlated to higher vacancy rate, and worse conditions  
Towards integrated conservation, real estate, and housing policies

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<p>Spatial Analysis for Heritage Economics in Historic Cities Chr. Ost</p> <p>Framework</p> <p>Non use values</p> <p>Use values and Real Estate</p> <p>Use values and Tourism</p> <p>Use values and Macroecon.</p> <p>Economic Landscape Djenné</p> <p>Typology Project</p> <p>Conclusions</p>	<h3>Some Indicators for Use Values from Visit/Tourism</h3> <ul style="list-style-type: none"> <li>* Access to the heritage: all-year round, seasonal, once or twice a year;</li> <li>* Admission fees (including free access);</li> <li>* Carrying capacity and visitor rate as a percentage of carrying capacity;</li> <li>* Number of visitors;</li> <li>* Assisted and guided visits, availability of audio-equipment, museum of the monument, monument store;</li> <li>* Visitor behavior (satisfaction, time spent);</li> <li>* Parking, transportation, guided tour;</li> <li>* Average expenditures per visitor per day (time spent in the city, number of stays);</li> <li>* Sales related to visitors;</li> <li>* Heritage-related events organized in the city (festival, exhibition, artistic performance).</li> </ul>
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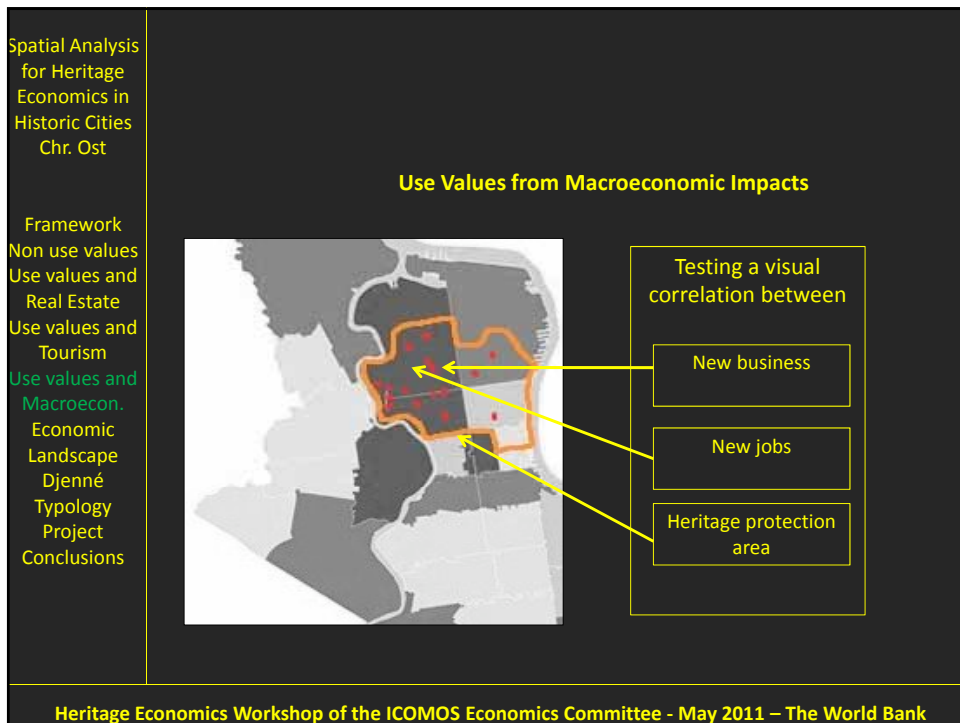
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### Use Values from Macroeconomic Impacts

<i>Heritage-related Activity</i>	<i>Macroeconomic Indicators</i>	<i>Mapping Units</i>
Heritage open day	Expenditures made during the event (use values)	Places where expenditures are made
Income from tourist-related activities re-spent in the economy	Number of jobs, income generated in related sectors	Places where jobs and income are measured
Property values for non-heritage buildings	Property values (use values)	Parcels, blocks of properties
New business, due to heritage conservation projects	Jobs created, Income generated	Locations of new business

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### Mapping the aggregate economic value

COMPOSITE INDEX

HOLISTIC APPROACH

SPATIAL ANALYSIS

MAPS

INDICATORS

VALUES

- Non Use Values
- Use Values related to Real Estate
- Direct Use Values from Tourism
- Indirect Use Values from Tourism
- Use Values from Macro Impact

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### Economic Landscape

Historic center of the City of Diest, Belgium. Expertise assessment (scale 1 to 5) for several indicators. Two- and three-D graphical display.

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Given the setting of the historic city, the ground configuration, the physical and social features of the city, economic landscapes could have different patterns expressed through different shapes (as for an economic Hinterland).

A B C D

Concentric Linear/Directional Star-shaped Multiple/Scattered

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Mapping economic values in the World historic city of Djenné in Mali

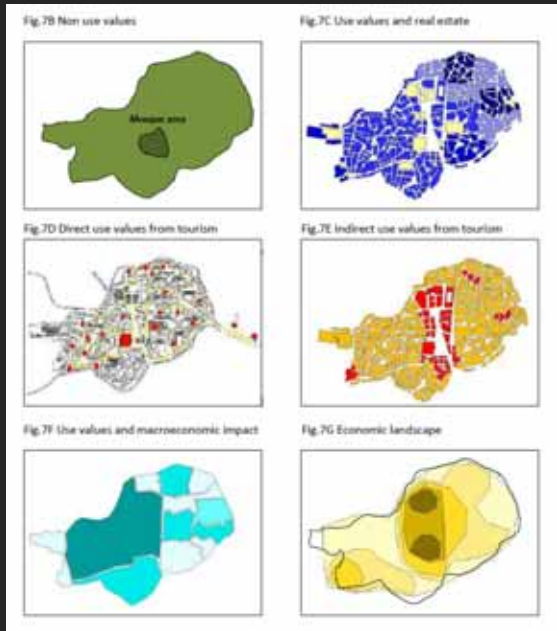
Plan de Djenné  
Mali

Kathleen Louw (Getty Conservation Institute, Los Angeles)  
And Yamoussa Fané (Cultural Mission of Djenné), March-April 2009

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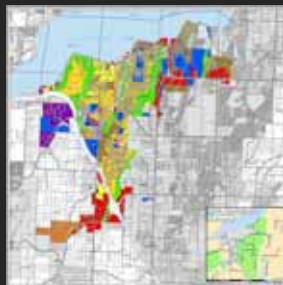


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**Spatial Analysis aims to:**



- Define protection areas compatible with spatial economic consideration
- Prevent future conflict between local economic development and historic conservation
- Coordinate economic landscape with Historic Urban Landscapes
- Provide information to improve housing, tourism, and social issues

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<b>Towards a Typology of Historic Cities</b>	
<b>Spatial Analysis</b>	<b>Applications</b>
<i>There are little non use values, or non equally distributed across the city</i>	<i>Enhance cultural values Improve cultural status Advertise the city abroad</i>
<i>There are little use values, or non equally distributed across the city</i>	<i>Promote rehabilitation and housing policy, Develop cultural tourism, Prevent gentrification</i>
<i>Use values are predominantly attached to a single type of activity</i>	<i>Coordinate city planning with heritage conservation Prevent mass-tourism</i>
<i>There are little indirect use values related to tourism specifically</i>	<i>Develop tourism accommodations Improve city infrastructure and public spaces</i>
<i>There are little use values related to macroeconomic impacts in general</i>	<i>Attract new businesses and investments, Organize city events, Reduce macroeconomic leakages</i>

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### Spatial Analysis aims to:

- Identify and measure the economic returns of conservation projects
- Display the economic impact and values of conservation projects
- Guide city authorities or heritage caretakers in their assessment /implementation of conservation projects

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	Residents	Occupation	Use values from real estate	Rental values	
	Visitors	Benefit from the visit	Use values from tourism	Admission fees, Visits	
	Population at large	Existence, Bequest values	Non use values	Willingness-to-pay	
	Business, Shops, Services	Residents and visitors expenditures	Indirect use values, Macro use values	Jobs, Income	
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**Thank You**



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