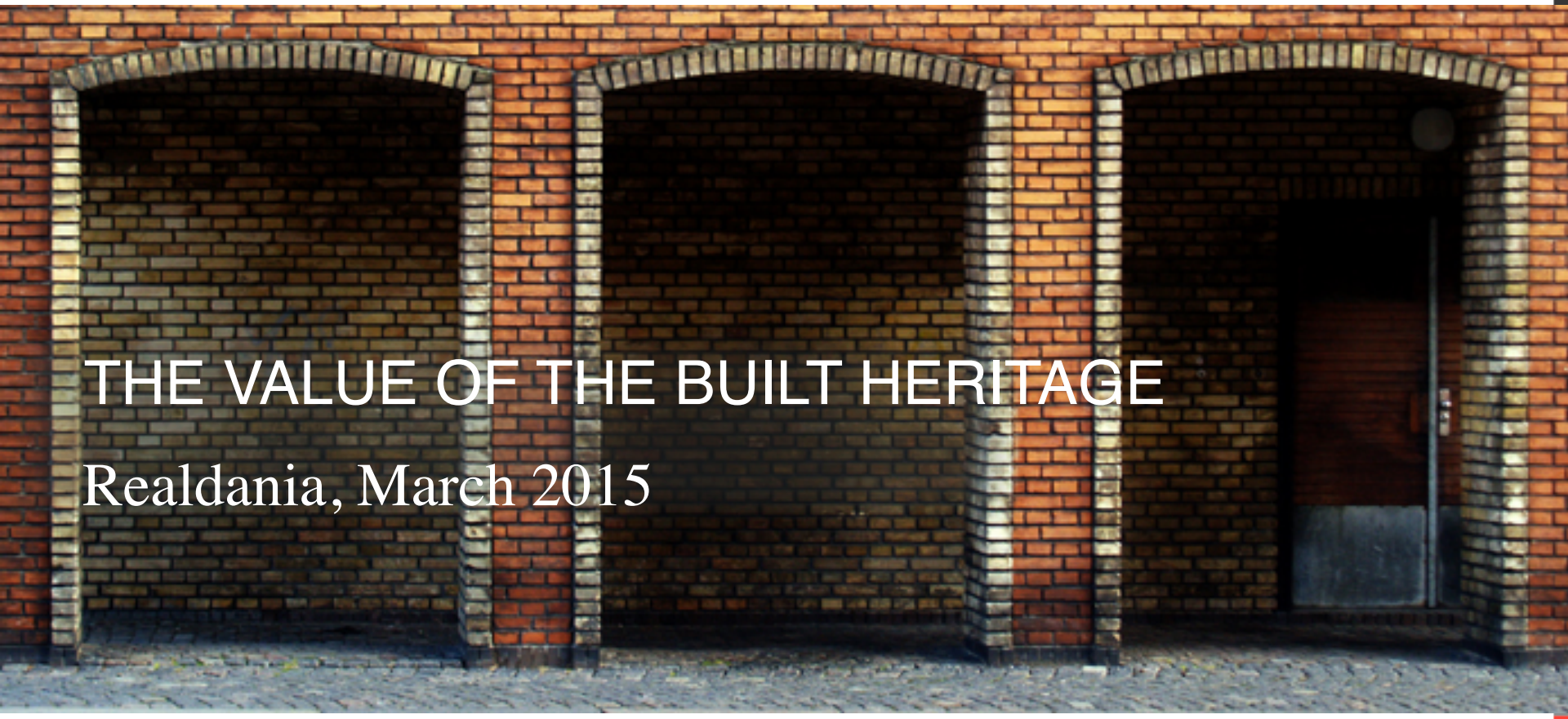

THE VALUE OF THE BUILT HERITAGE

Realdania, March 2015

INCENTIVE

WE TAKE THE GUESS WORK OUT OF DECISION-MAKING

5 KEY RESULTS

Read more about figures and other results in the following four-page summary...

30% *higher sales prices for preservation-worthy single-family houses.*

13% *higher home prices in areas with more than 15 % preservation-worthy buildings.*

2/3 *of tourists visiting Ribe do so because of the city's built heritage.*

DKK 92 mill. *additional annual revenues for businesses in Ribe because of the city's built heritage.*

136 *More people in work in Ribe because of the city's built heritage.*

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A general picture

Many of us live in and use historic and preservation-worthy buildings. But do we know the value of these buildings for society? Incentive has been commissioned by Realdania to explore this question and to put it into figures. The consultancy firm Dansk Bygningsarv A/S commented on the analysis along the way and helped select and describe the six cases presented in section 2.3. Incentive is responsible for the remainder of the report.

The report is the first-ever overall review of existing knowledge about the economic value of built heritage. We collate all of the important impacts that have been identified in the relevant literature and we explain how these impacts affect each other in a value map. This provides a general picture of the ways in which built heritage generates value.

New knowledge

We produce entirely new knowledge about the value of built heritage within two areas selected in collaboration with Realdania.

Firstly, we put into figures how much more people are willing to pay for preservation-worthy homes. And how much their neighbours are willing to pay to live in an area with many preservation-worthy buildings.

Secondly, we zoom in on the city of Ribe, putting the city's built heritage into figures. We provide the first-ever statistical analysis of the significance of built heritage for tourism. And we put into figures what built heritage means for the local economy and job creation.

Sparse existing knowledge

We have reviewed what existing knowledge we have been able to find, in the form of articles in international peer-reviewed journals and miscellaneous reports and books on the subject; a total of more than 80 reports and articles.

Existing knowledge generally appears to be somewhat sparse; both with regard to the impacts we have looked at and the methods used.

The studies reviewed reveal e.g. that built heritage is of value to the people who live in the buildings and who use the urban environment that contains these buildings. Thus, in countries outside Denmark, prices of preservation-worthy homes are up to 20% higher. The studies reviewed also show that built heritage typically has a higher value for neighbours than for owners, as owners have to pay expensive maintenance costs while neighbours can are free to enjoy the view without charge.

However, the studies also show several examples of built heritage having value for people who do not benefit from the buildings on a daily basis. This is because built heritage has value - even when people are not actually using it at the moment.

No studies have looked at the total value of built heritage for society compared with a situation with no built heritage. And only a few studies have examined why people are willing to pay for built heritage.

How does built heritage generate value?

On the basis of the literature reviewed, we collated the most important built heritage impacts and we then created a value map showing the causality of impacts; from the built heritage to the values it generates in society.

Firstly, built heritage generates what we refer to as 'direct value'. The direct value of built heritage is the cultural heritage, architecture, historic environment or originality of the buildings themselves, as well as the sense of identity and pride that people derive from living in an area with built heritage.

This has numerous induced impacts, such as better social cohesion and the fact that people feel safe living in the area.

Furthermore, it can help attract tourists and new residents, which, in turn, has a positive impact on revenues and jobs in the local business community, and it helps local government finances.

The full value map, including the causal relationship of impacts, is presented in this report.

People are willing to pay more for built heritage

In order to produce new knowledge about the value of the Danish built heritage, we conducted the first nationwide Danish study of the relationship between preservation-worthy homes and their sales prices. In other words, we set out to answer the following question: How much are people willing to pay to live in a preservation-worthy home?

One of the advantages of the method is that it reflects people's actual choices. At the same time, the data material is unique and comprehensive, which means the result is more reliable.

The analysis shows that single-family houses with a high preservation value are sold at square-metre prices that are on average 30% higher than for other single-family houses within the same municipality. For owner-occupied flats the price is on average 18% higher. If we include listed homes, the figure is even higher.

And neighbours also benefit from the built heritage. If we compare the price of the not-preservation-worthy buildings with the number of preservation-worthy buildings in the local area, we see that the price of the not-preservation-worthy homes increases with the number of preservation-worthy buildings present in the local area. If there are more than 15% preservation-worthy buildings in a local area, prices of not-preservation-worthy homes will be 13% higher.

Specific initiatives can enhance value

Finally, we have looked at six specific cases on built heritage initiatives.

These initiatives have involved e.g. investing specifically in preservation of buildings and in raising the aesthetic expression of the buildings and urban spaces that underpin the overall experience of an area's built heritage. There have been initiatives in the form of local development plans seeking actively to safeguard built heritage preservation. And there have been initiatives to involve residents and the local community to raise local knowledge.

Several of the initiatives have yielded strong positive impacts. In Hasseris near the city of Aalborg, the area increased its value by 10 percentage points relative to the remainder of Aalborg, and in Troense near the city of Svendborg, the price difference compared to the adjacent Eskær increased from 14% to 93%.

In Lønstrup in North Jutland and in Ballum in Southern Jutland, initiatives indicated positive impacts, while a project in Svaneke did not show any discernible impacts.

Renewal projects are a nuisance while they are in progress. This might be the reason for the negative impacts observed in Christiansfeld in Southern Jutland while the project was still in progress.

Built heritage attracts tourists

The built heritage attracts tourists because of the historical and cultural values it represents. And it serves as the basis for tourist attractions such as museums, which build further on the historical values in the area.

We have combined a unique data material, consisting of data on preservation-worthy buildings and tourist numbers in Southern Jutland, and we have carried out the first analysis to show the relationship between the various data.

The result clearly shows that built heritage is an important driver of tourism. It is our best estimate that two-thirds of tourists that visit Ribe today, do so because of the built heritage, including induced impacts.

And tourism means growth

Tourism is an important driver of local growth. Tourists visiting Ribe because of its built heritage result in total additional revenues of DKK 92 mill. annually for the local business community, as well as an additional 136 local jobs.

Assuming these 136 people would otherwise have been unemployed, this means that Esbjerg Municipality is improving its budget by a total of DKK 14 mill. every year, even after taking into account that around 20% of employees live in other municipalities.

Preservation-worthy homes may also attract new residents to an area. We have examined this aspect for Ribe, using data on household incomes and on preservation-worthy homes. The result does not reveal any clear relationship.

We have assessed preservation-worthy homes in Ribe to be worth more than an additional DKK 100 mill. due to their preservation-worthy status.

In overall terms, our analysis shows that the built heritage is an important driver of tourism and, by association, of local growth as well.

Analysis of the economic value in three sections

In spring 2014, Realdania asked Incentive to examine the economic value of built heritage in Denmark. The consultancy firm Dansk Bygningsarv A/S commented on the analysis along the way and helped select and describe the six cases presented in section 2.3. Incentive is responsible for the remainder of the report.

We present the results in the following three sections:

+ **In section 1** we map how built heritage generates economic value in Denmark, and we sum up existing knowledge in Denmark and abroad.
+ **In section 2** we map the value of built heritage on the basis of property prices.
+ **In section3** we zoom in on Ribe, putting into figures how the city's built heritage adds value.

Table of contents

Here are descriptions of some of the key terms we use in this report

+ **Direct value**

  The direct value of an area's built heritage is the value which derives from the buildings' cultural heritage, architectural and environmental values and originality, as well as from the sense of identity and pride associated with built heritage.

+ **Induced value**
  The values that are induced by the direct value of built heritage.

+ **Direct impact**
  An impact which does not take effect through several stages, but goes straight from cause to effect.

+ **Value map**
  A map that shows how impacts affect each other.

+ **Reference scenario**
  The basis of comparison used when assessing an impact.

THE VALUE OF THE BUILT HERITAGE

Section 1: Literature and value map

INCENTIVE

VI FJERNER GÆTVÆRK FRA BESLUTNINGER

Background

The value of an area's built heritage originates and spreads through society like ripples. Many people enjoy the Danish built heritage on a daily basis, and the Danish built heritage underpins Danish businesses, including tourism. We have divided section 1 into three sub sections:

+ In section 1.1. we explain how value is perceived by economists.
+ In section 1.2. we map how built heritage generates economic value in Denmark.
+ In section 1.3. we sum up existing knowledge in the literature about the value of built heritage, focussing on quantitative economic impact assessments.

In overall terms, section 1 forms the basis for sections 2 and 3 in which we go into more detail with specific topics and methods.

Contents

The list of literature is towards the end of the report.

1.1 ABOUT ECONOMIC ANALYSES

Literature and value map

1.1 THE REFERENCE SCENARIO IS DECISIVE

Measuring the value increase

How much value is generated by built heritage depends on the reference scenario we use.

Our reference scenario can be a building before it is renovated, e.g. the merchant's house in Haderslev (1). Or a larger area, e.g. Vojens (2), as in the case of measuring the value of Christiansfeld.

If we choose a poor reference scenario, the estimated value of the built heritage will be wrong.

Reference scenario

Project

(1) *Merchant's house in Haderslev*

Value is generated →

Merchant's house in Haderslev

(2) *Vojens*

Value is generated →

Christiansfeld

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1.1 GOOD OR BAD FOR TOURISM?

Renovation, of e.g. the Søllestedgård manor farm, can be the driver of local tourism. However, it may also erode the foundation for tourism for other local attractions.

Whichever impact we measure depends on whether we look only at the individual location or whether we include impacts on the entire local area, region or country. It is important to remember this when we talk about economic value.

Whether you measure the impact locally, for a larger area, or for the entire country will be crucial for the final result.

Søllestedgård

1.1 WE DIVIDE VALUE INTO TWO MAIN GROUPS

Direct value

Built heritage has value because people appreciate it. This may be because of the cultural heritage, the architecture, the historic environment or the originality which the buildings represent. The built heritage of an area can provide people with a sense of identity and pride.

At the same time, people may appreciate an area's built heritage, even if they themselves do not use the buildings on a day-to-day basis. For example, this may be because they plan to make use of this heritage at a later stage, or because they want to preserve the heritage for future generations.

Overall, we refer to this as *direct value*. See the box below.

We have most of these concepts from the literature. Most of them are included in the Danish Agency for Culture's guidelines on appraisal of preservation-worthiness, see Danish Agency for Culture (2011).

Induced value

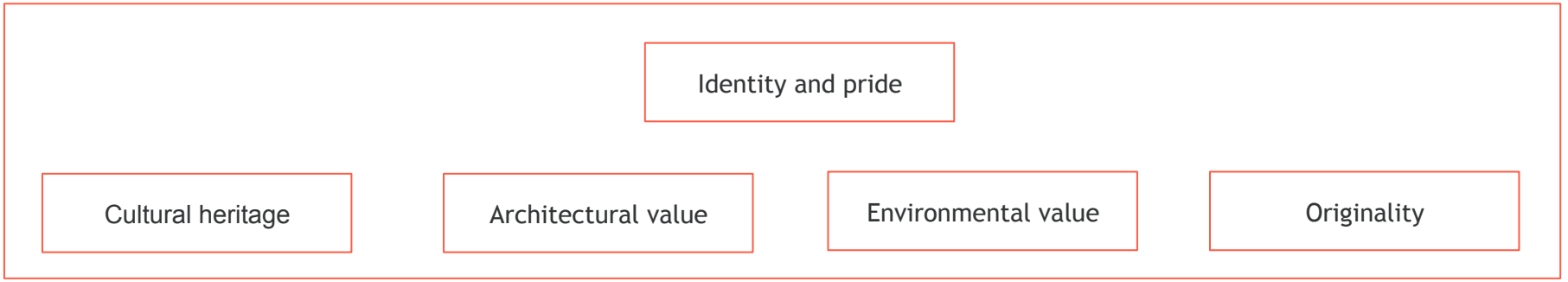
The direct value often rubs off to other areas. This can be because an area's built heritage attracts tourism, which, in turn, generates greater revenues for local businesses. In this situation, there is a direct value for tourists, while there is an induced value for local businesses in the form of greater revenues.

When a direct value rubs off to another area, we therefore call it an *induced value*.

In section 2, we provide an overview of the relationship between direct value and induced value.

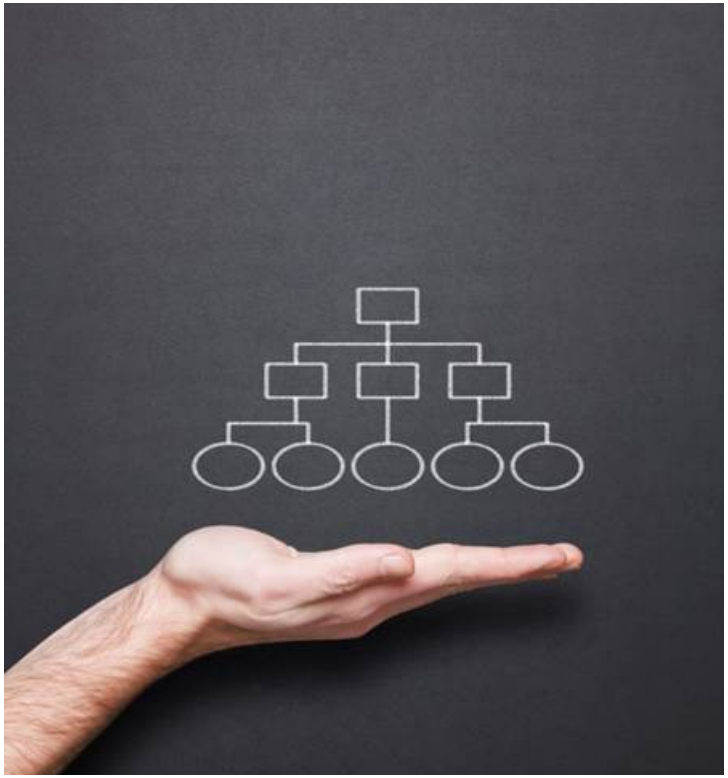
Overleaf we describe what should be taken into consideration when estimating the direct value.

The direct value of built heritage



1.2 VALUE MAP

Literature and value map



INTRODUCTION TO THE VALUE MAP

The value map shows us who are beneficiaries…

We have prepared a value map which shows the value of built heritage from a local-government point of view. We have divided impacts by four main beneficiaries of built heritage:

- Residents
- Tourists
- Businesses
- Local government finances.

In section 3, we will be provide key figures for the value map.

So, how do they benefit…?

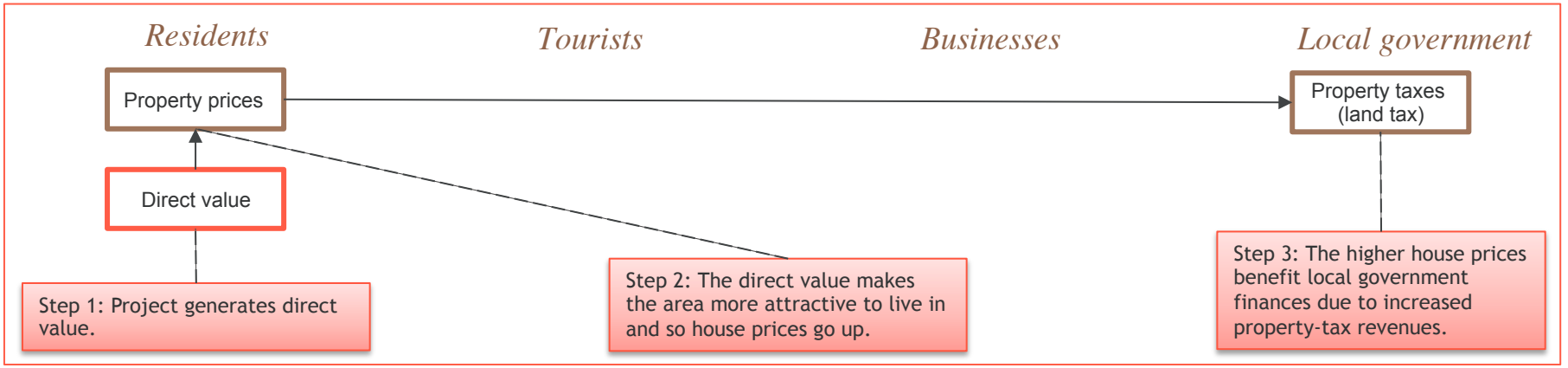
In addition to the direct value, built heritage also has induced values. The value map distinguishes between these by showing:

- Direct values in red boxes
- Induced values in brown boxes

The values affect each other. The most important impacts are illustrated as arrows.

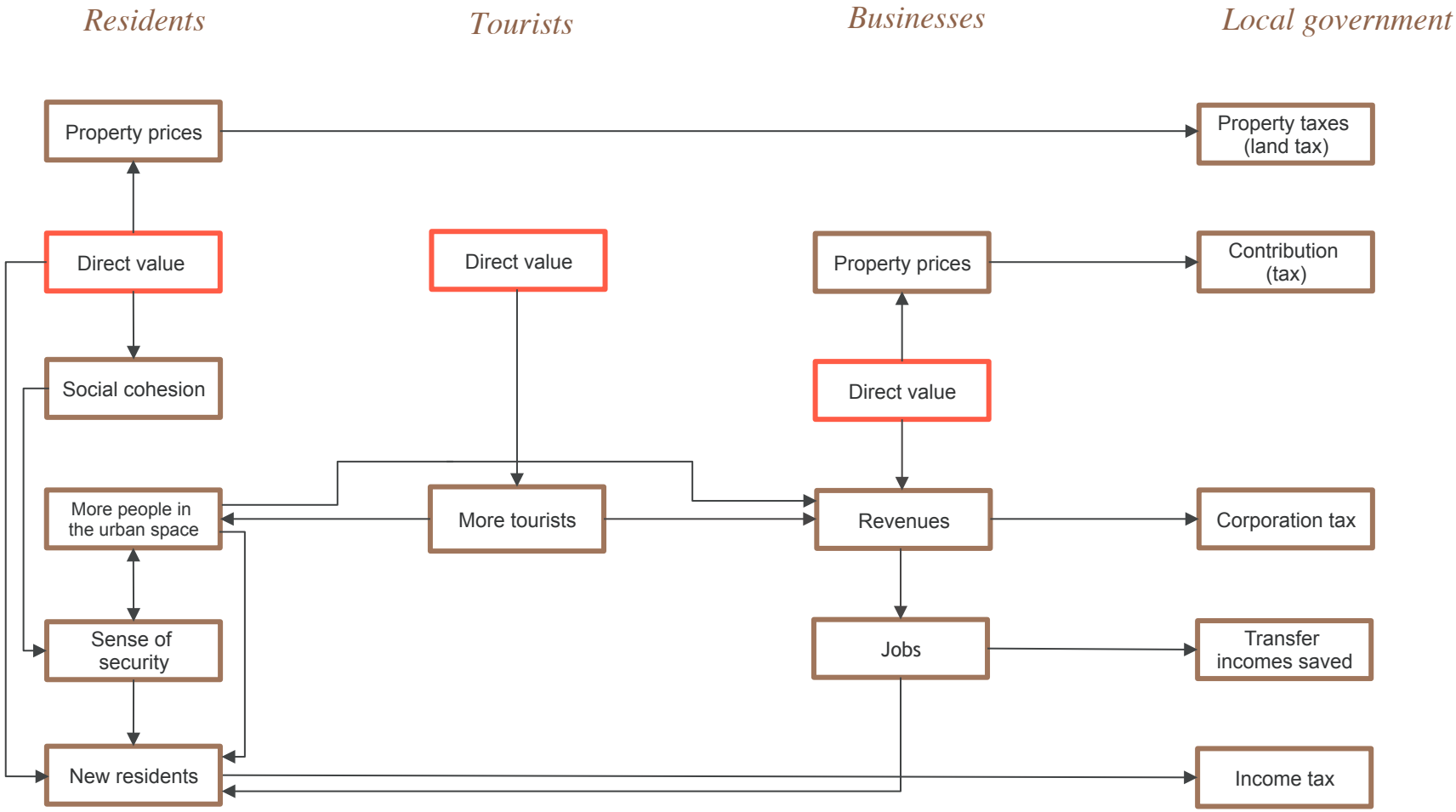
The diagram below shows the process in three steps.

Example of how to read the value map



1.2 BUILT HERITAGE VALUE MAP

Below is the complete value map that we have drawn up on the basis of the literature reviewed (see the next section).
Red boxes represent the direct value, while brown boxes represent the induced values.
Arrows indicate important causal relationships.
We explain these relationships in more detail in the following and provide figures for the impacts.



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1.3 LITERATURE REVIEW

Literature and value map

1.3 BUILT HERITAGE VALUE IN THE SCIENTIFIC LITERATURE

Background

We have examined the value of build heritage in scientific articles and expert reports. The purpose of this has been to sum up existing knowledge about built heritage value, including qualitative and quantitative appraisals of the value of built heritage.

We reviewed a total of 80 reports and articles:

- 40 scientific articles.
- 40 reports.

The literature is all new:

- Published after1996.
- 50 % published after 2007.

The scientific articles and expert reports span broadly:

- From statistical analyses of house prices.
- To studies of willingness to pay analysed by individual buildings.

We have carefully selected the figures:

- The studies have uncertainties and often include several estimates.
- We have chosen the figures that are most comparable.

The list of literature contains all of the studies that we selected.

The remainder of the studies that we reviewed are either purely qualitative studies or unreliable in their choice of data and methodology.

Main conclusions of the literature review

- In countries outside Denmark, prices are typically 0 % - 20 % higher for preservation-worthy homes.

People often value the existence of built heritage much more than the value of actually using it.

- They are willing to pay more to preserve built heritage than to visit it.

Listing of built heritage has positive as well as negative impacts on the built heritage value.

- When a listing involves restrictions on use, the sales price is reduced.
- But at the same time, a listing has signal value and creates stability in the local area.

Built heritage is often worth more for neighbours than for owners.

- Owners have expensive maintenance costs, while neighbours can enjoy the free view free of charge.

Built heritage *involves* a large part of the economy, but we do not know how much added value it *contributes*.

- All studies that examine the overall impact at national level look at involvement rather than at contribution. For example, the studies estimate the number of tradesmen employed on built heritage maintenance, but without taking into account that these tradesmen would obtain other work if the built heritage stock was smaller.

1.3 STUDIES FOCUSSING ON RESIDENTS

The figure shows the studies which estimate the value for residents. The left column shows studies of house prices, and the right column shows other studies of willingness to pay (WTP).

What does the literature tell us?

Prices are typically 0%-20% higher for preservation-worthy homes.

Listing has both positive and negative impacts on the price of a house. For example, Noonan et al. (2011) shows that listing:

+ May lower prices, because the listing entails limitations on use, and because of extra maintenance.
+ May raise prices, because cultural heritage has signal value and ensures predictability about conservation of the area.

Historic value raises house prices for neighbours:

+ Sometimes by more than for the historic building itself.
+ Neighbors enjoy the architecture without having to pay for maintenance.

There is large willingness to pay for living in an area with attractive built heritage. Residents in an area are willing to pay:

+ DKK 2,500 to DKK 4,500 per household for historic buildings with attractive facades.

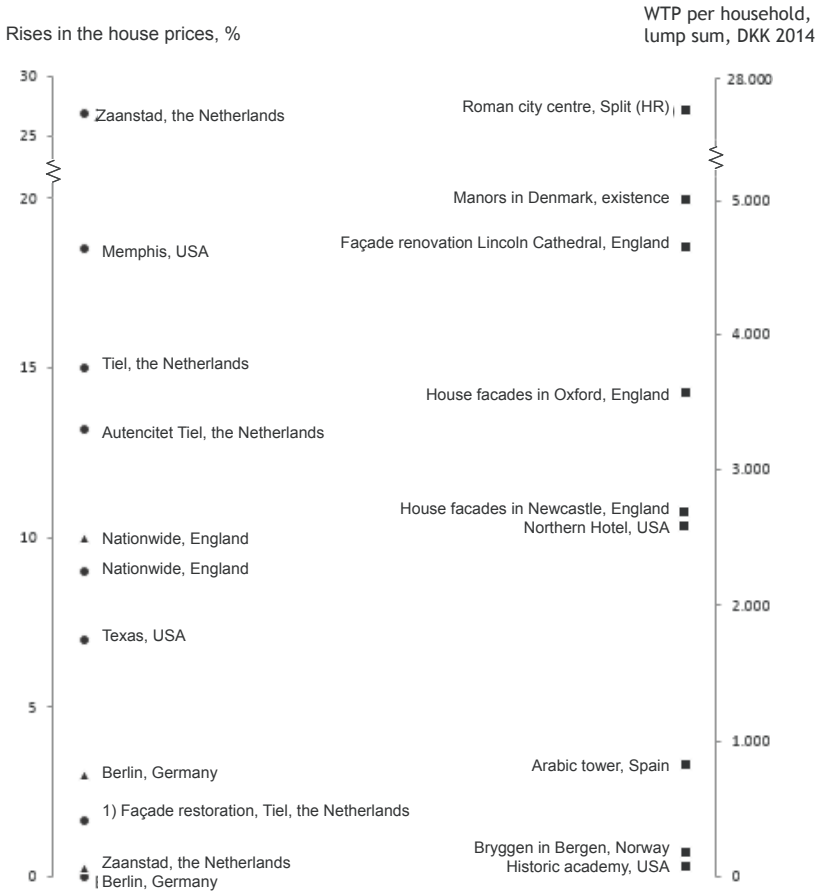
Increases in house prices

Studies examining house prices reveal peoples' actual willingness to pay for built heritage.

Alternative methods for studying this willingness to pay include stated preference studies, which involve asking people about their preferences. This method can lead to results that do not reflect reality if people answer differently than they act in real life.

This can be avoided through studies of house prices.

Overview: The value for residents



● Rise in house price, own home
▲ Rise in house price, neighbouring homes
■ PWT per household, lump sum

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1.3 SOCIAL COHESION AND SENSE OF SECURITY

Built heritage can generate social cohesion

We did not find any studies that have valued the social cohesion generated by built heritage. But we found positive indications that built heritage generates social cohesion. Examples are shown below.

UK

56% agree that they feel pride in local historic buildings and monuments.

Source: Heritage Lottery Fund (2009)

Denmark

92% believe that cultural heritage creates identity.

Source: The Danish Agency for Culture et al. (2005)

Norway

40% believe that cultural heritage enhances social cohesion.

Source: Rambøll (2012)

Social cohesion can provide a sense of security

We also found studies which show that social cohesion is highly valued.

For example, a Canadian study by Helliwell and Wang (2010) found that sense of belonging to the local community

+ Raises the sense of security.
+ Increases quality of life.

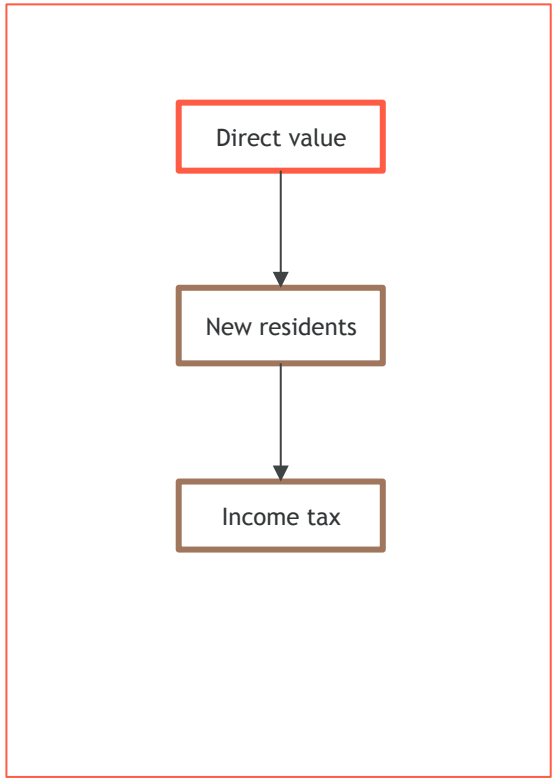
The study asked people about their sense of security. Sense of belonging to the local community (social connectedness in the community) was measured on the basis of e.g. the number of years people had lived in the area.

In the UK, a large study shows that improving the social connectedness in the community from poor to strong will have an impact on the quality of life of people equivalent to an additional annual income of DKK 42,209. (HACT 2014).

Therefore, there is reason to believe that built heritage generates specific value in the form of social cohesion, sense of security and quality of life.

1.3 HOW NEW RESIDENTS GENERATE INCOME TAX REVENUES

Section of value map



New residents mean more income tax revenues

As the preceding pages have shown, people appreciate living in buildings and in areas rich in built heritage. People moreover appreciate having well-preserved built heritage in their local area (existence value).

This can encourage some people to choose to live in one particular municipality rather than another.

In Denmark, a large percentage of the income taxes people pay goes to the municipality in which they live. When the built heritage attracts more residents to a municipality, it therefore increases the municipality's tax revenues.

Local governments receive between 22.5% and 27.8% in income tax

1.3 STUDIES FOCUSSING ON TOURISM

What does the literature tell us?

The existence value may be much higher than the use value of built heritage, especially for domestic tourists.

- + See e.g., Nidaros Cathedral on the graph to the right.

The value of visiting farms, monasteries, castles and cathedrals lies typically at between DKK 15 and DKK 70 per visit.

The existence value of larger attractions can be as much as around DKK 100 per visit, e.g. the existence value of Nidaros Cathedral in Norway, see the figure to the right.

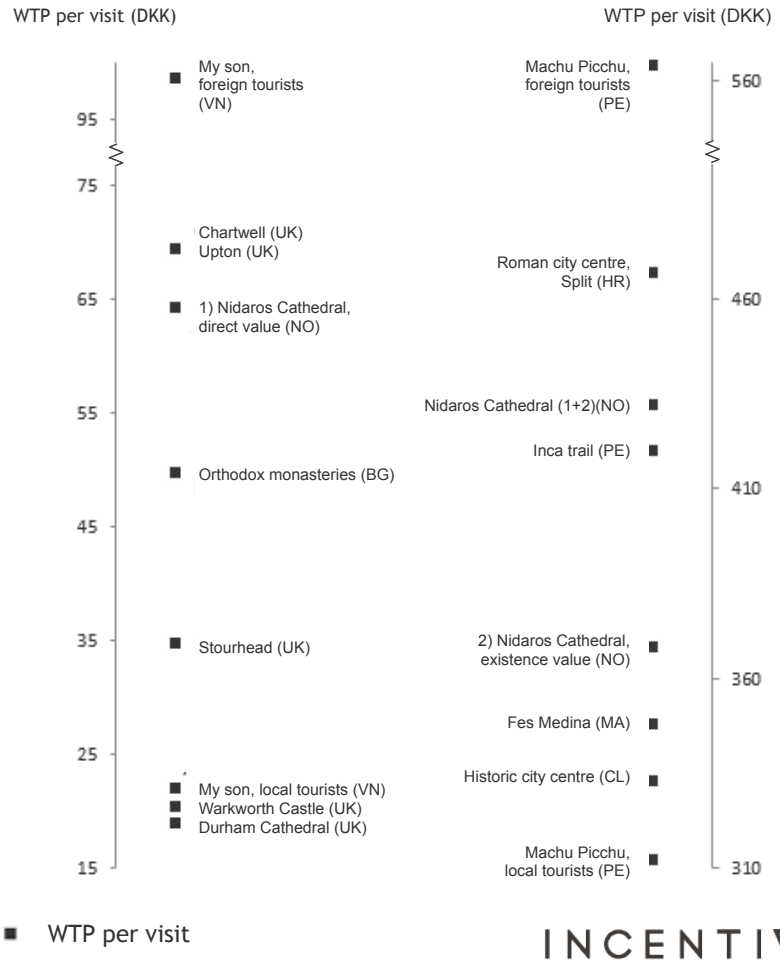
Some studies appraise whole city centres, while others appraise individual buildings.

Willingness to pay

Willingness to pay (WTP) is the maximum price that the average person is willing to pay to visit or for the mere existence of built heritage.

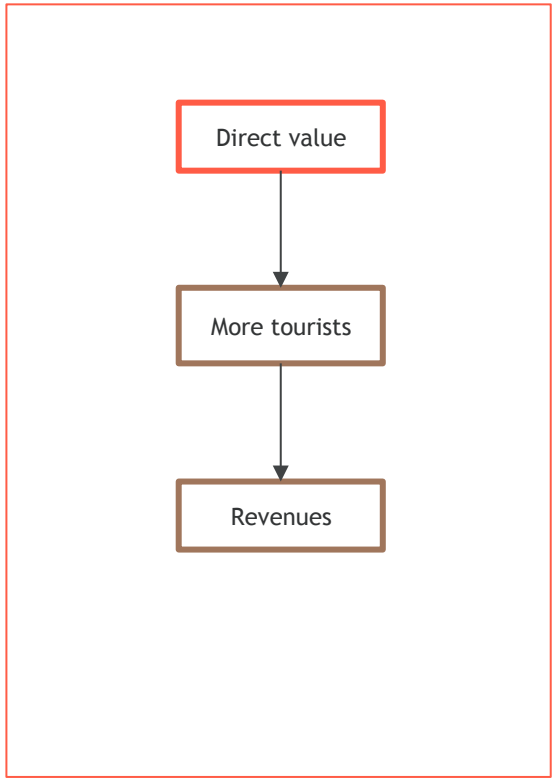
The figure shows the studies which estimate the value for tourists. All of these studies are WTP studies.

Overview: The value for tourists



INCENTIVE

Section of value map



How tourists generate revenues

Amongst other things, tourists visit Denmark to experience the Danish built heritage. A walk through the historic terraces of Nyboder, a former Naval barracks in Copenhagen, provides tourists with the direct value of experiencing first-hand the living conditions of sailors' families in the 1600s.

Tourists visiting Copenhagen and Nyboder spend money. A tourist in Denmark spends on average DKK 464 per day (in 2014 prices, VisitDenmark 2013).

We will look more closely at how businesses benefit from the built heritage on the following pages.

A tourist in Denmark spends on average DKK 464 per day

Gram Castle

Revenues

Direct value

The value for businesses

Typically, value is generated in three industries:

+ The tourist industry.
+ Industries associated with the building sector.
+ Other industries using the built heritage to brand their products or in their branding aimed at employees and customers.

Local development

Several studies from England, Scotland and Ireland suggest that activating the built heritage can generate more revenues and create more jobs locally.

For example, in an analysis of built heritage in Great Britain, Ecorys (2012) shows that for every DKK invested in the built heritage, a total added value of around DKK 2.5 is generated for society. The analysis does not consider the value of investing elsewhere.

Branding

Built heritage is also used e.g. to promote farm produce. A Danish example is Gram Castle, where the value of the castle's farm produce increases when Gram Castle is referred to in marketing for the produce.

A Danish study of manor farms showed that manor farms can sell their produce at 10%-25% higher prices than other farms (Rambøll 2008).

Studies focussing on the value for businesses (impact studies) do not say anything about the value for society; this requires socio-economic cost-benefit studies.

Impact studies

Impact studies and socio-economic cost-benefit studies differ. One difference is that impact studies leave out some of the dynamics and impacts which socio-economic cost-benefit studies include:

+ They do not include a reference scenario.
+ They do not include the disadvantages incurred by other players.
+ They do not include welfare.

Impact studies focus on:

+ Job creation.
+ Locally induced values.

In general, this means that impact studies highlight a project's *involvement*, e.g. number of employees, while the socio-economic cost-benefit analyses show the value a project generates, e.g. the reduced number of unemployed people. Impact studies, therefore, do not tell us anything about whether we have become richer as a society or if we have obtained

Built heritage value per capita	Wales*	Scotland**	England***
Total consumption	DKK 8,000	DKK 12,900	DKK 6,000
Total added value	DKK 3,600	DKK 6,800	DKK 2,600
Percentage of all jobs****	2%	2.1%	1.8%

* Source: Ecorys (ECOTEC) 2010 and own currency and per capita conversions.
** Source: Ecorys (ECOTEC) 2009 and own currency and per capita conversions.
*** Source: Ecorys 2012 and own currency and per capita conversions.
**** Percentage of the economically active population, source: "ONS A01 Labour market statistics summary data tables".

Impact studies illustrated

Consumption on a project results in:

+ Pay for employees.
+ Possible profits in the project.

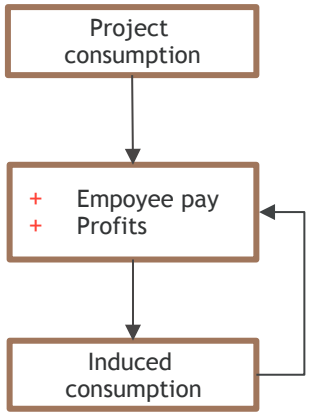
Both of these lead to *induced* consumption.

In surrounding businesses, induced consumption results in:

+ Pay for employees.
+ Possible profits in the project.

In each step, resources are consumed.

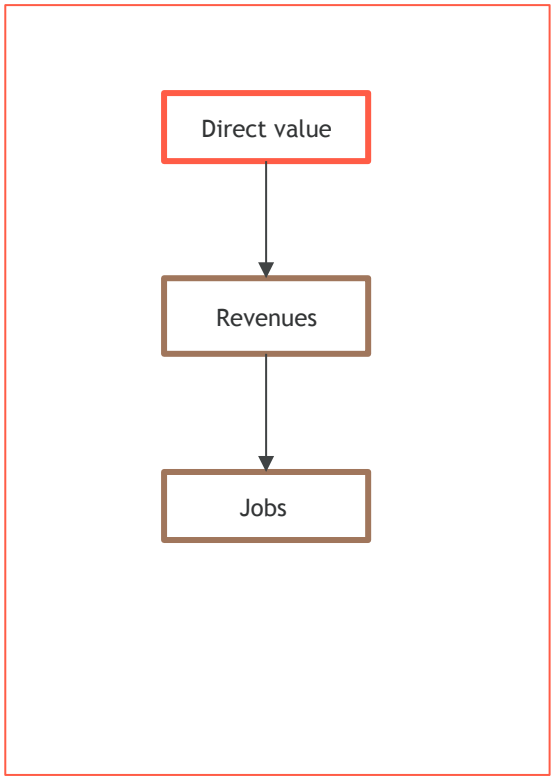
+ Such as rental and material costs.



+ *Total consumption* is the sum of consumption throughout the course of the project.
+ *Total added value* is the total consumption minus the resouces consumed.
+ *Total number of jobs* is the total number of positions supported by the project.

HOW REVENUES LEAD TO JOBS

Section of value map



How revenues lead to jobs

As mentioned above, the built heritage provides a direct value for a number of business sectors in Denmark. For example, looking at the Nyboder example, not only tourists themselves experience a direct value from the preservation of Nyboder; so too do the local tourism businesses.

When a company can set higher prices or sell more products, its revenues increase.

As mentioned above, companies can then spend these increased revenues on resources or hiring. Many companies are willing to pay up to DKK 500 more annually per m^2 for offices in historic or preservation-worthy buildings (Danish Agency for Culture 2005), and companies fill on average 1.45 full-time positions for every DKK 1 mill. spent by tourists. (Visit Denmark 2013).

1.45 full-time positions are generated for every DKK 1 mill. spent by tourists

1.3 EXAMPLE 1: NORTHERN HOTEL, USA

The value of a unique building

The Northern Hotel is a unique hotel in Fort Collins, USA, dating back to 1866. The hotel's value was measured by asking local residents what they would be willing to pay to prevent the hotel from being demolished. Households replied that they were willing to pay on average DKK 2,600.

In 2003, the hotel was restored in a publicly-funded project. The cost at that time was DKK 6.1 mill., corresponding to DKK 200 per household in 2014 prices.

The study also shows that:

+ Increased information about the significance of the building caused paople to more than double their personal valuation of the building. This goes to show the uncertainty of studies that involve interviewing people.
+ Two-thirds of the value was because of the uniqueness of the building.

Component	Value in the study 2014 prices
Cost per household	DKK 200
WTP per household	DKK 2,600

Source: Kling et al (2004)

Northern Hotel, Fort Collins USA

1.3 EXAMPLE 2: GRAINGER TOWN, NEWCASTLE

The Grainger Town Project

Newcastle, England, is home to the historic Grainger Town, which Richard Grainger designed between 1824 and 1841. A study of the value of the historic facades asked local residents if they would:

+ Pay more in tax to have the historic buildings renovated.
+ Place more priority on certain parts of the building.

The result showed that:

+ There was a positive willingness to pay.
+ People preferred that resources be prioritised for the most run-down areas.

Component	Value in the study 2014 prices
WTP per individual	DKK 200 annually
All inhabitants	DKK 20 mill. annually

Source: Garrod et al (2004)

1.3 EXAMPLE 3: LINCOLN CATHEDRAL, THE FACADE

Lincoln Cathedral, England

The facade of the Lincoln Cathedral in England is constantly being blackened by exhaust from local traffic. Therefore, the facade is cleaned every 40 years. However, increasing traffic means the facade is being blackened ever more quickly. Researchers therefore estimated the value of cleaning the facade at shorter intervals.

This study asked local residents how much they were willing to pay to have the facade cleaned every ten years instead of every 40 years. The result showed that, on average, residents were willing to pay DKK 350 annually.

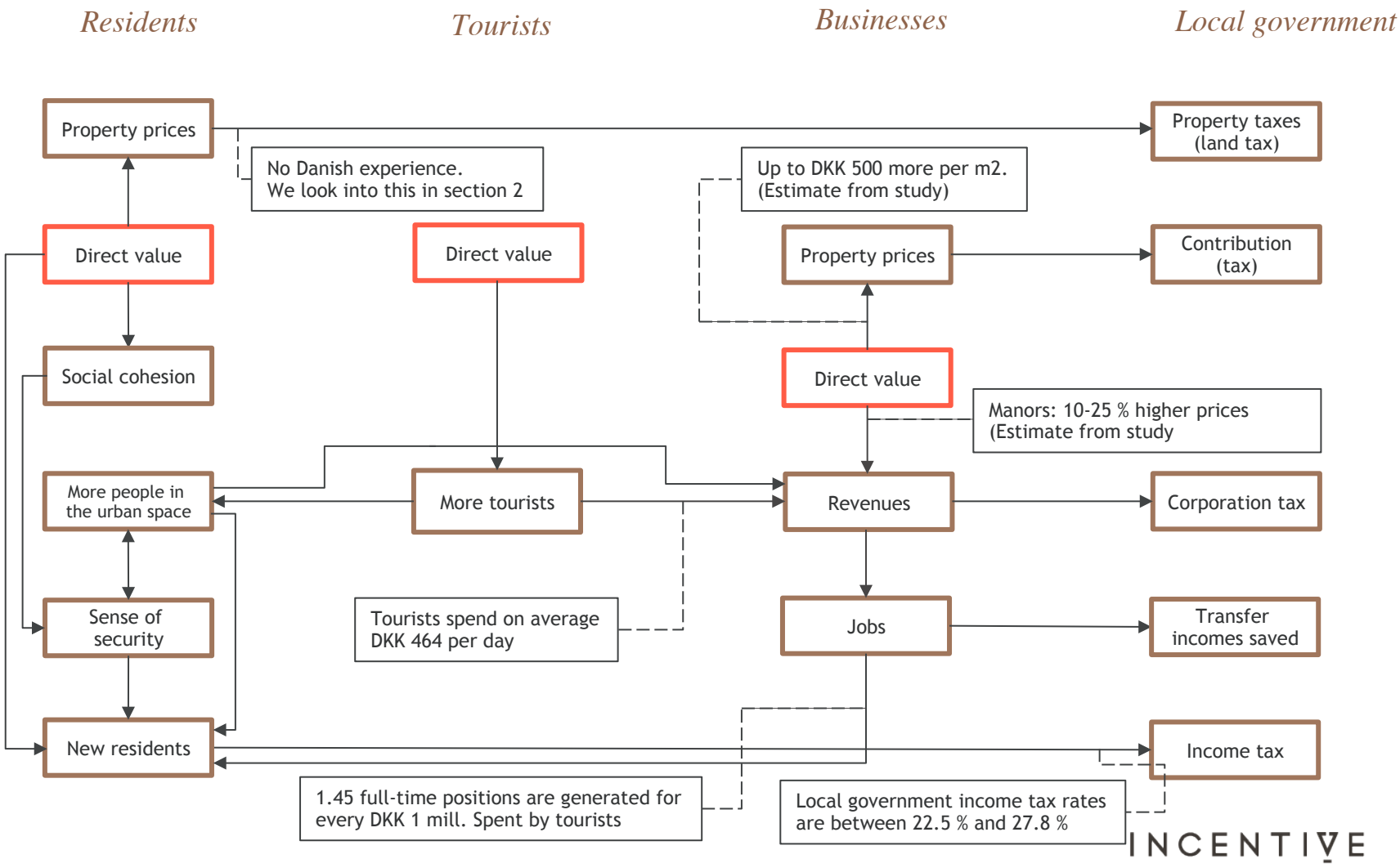
The respondents only rarely used the Cathedral for religious purposes. The primary utility value of the Cathedral was its aesthetic and cultural value.

Component	Value in the study 2014 prices
WTP per individual	DKK 350 annually

Source: Pollicino andMaddison (2001)

1.3 VALUE MAP WITH KEY FIGURES

On the basis of the literature review we here sum up appraisals from Danish studies of the value of built heritage.



THE VALUE OF THE BUILT HERITAGE

Section 2: The property market

INCENTIVE

VI FJERNER GÆTVÆRK FRA BESLUTNINGER

Background

In this section, we estimate the value of built heritage by comparing sales prices of preservation-worthy homes with those of not-preservation-worthy homes.

This is a recognised method used to estimate the value we attribute to benefits that are otherwise not priced.

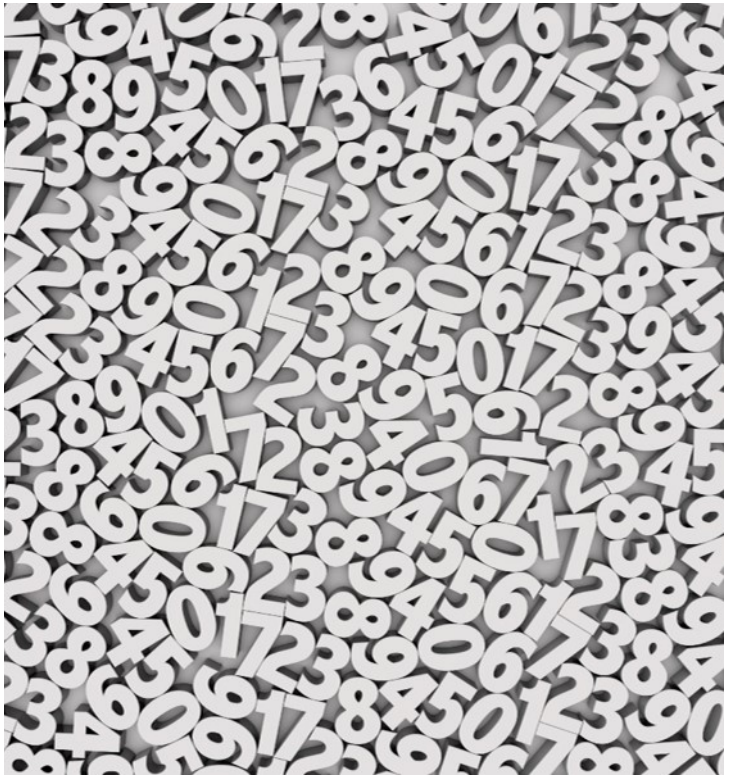
This method is used e.g. to value the qualities of the urban environment and to value the cost of noise nuisances.

We have divided this section into three sub sections:

+ Section 2.1: Introduction
+ Section 2.2: Results for all of Denmark
+ Section 2.3: Cases

2.1 DATA

Results from the property market



SAVE assessments in Denmark

SAVE is short for Survey of Architectural Values in the Environment and denotes a method to identify the preservation values of buildings.

The SAVE value of a building is assessed on a scale from 1-9 on five parameters: architectural value, cultural-historic value, environmental value, originality, and technical value.

The five parameters are summed up into one overall preservation value, which we have divided into three groups:

+ 1-3: High preservation value
+ 4-6: Medium preservation value
+ 7-9: Low preservation value

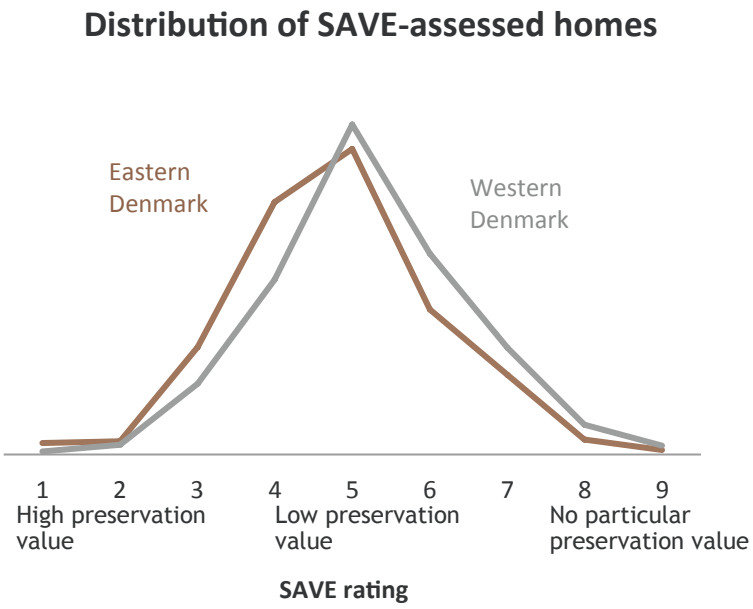
More than 350,000 buildings have been assessed in SAVE in Denmark. In the following, we look exclusively at homes.

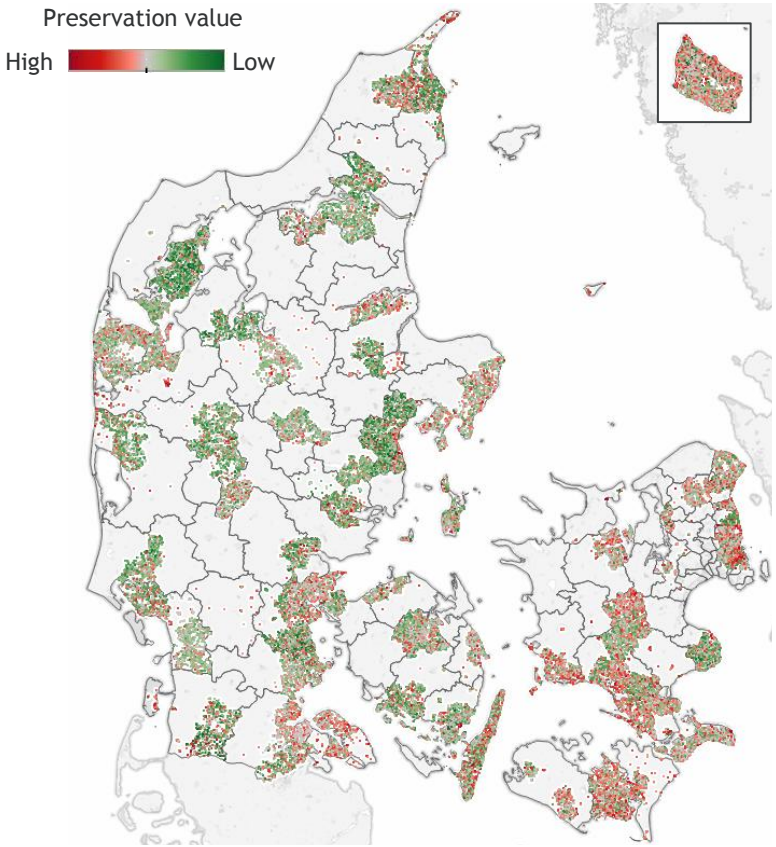
Geographical distribution

The map shows SAVE-assessed homes in Denmark. More detailed maps are in the Annex.

The homes are evenly distributed across Denmark and across urban as well as rural districts.

Homes in eastern Denmark have been assessed on average to be more preservation-worthy than homes in western Denmark.





SAVE rating and home sales since 1992

We compared the value of SAVE-assessed and non-SAVE-assessed homes on the basis of a set of data of all home sales in Denmark since 1992.

With more than one million sales, the data covers all ordinary sales of owner-occupied flats and single-family houses for private residence.

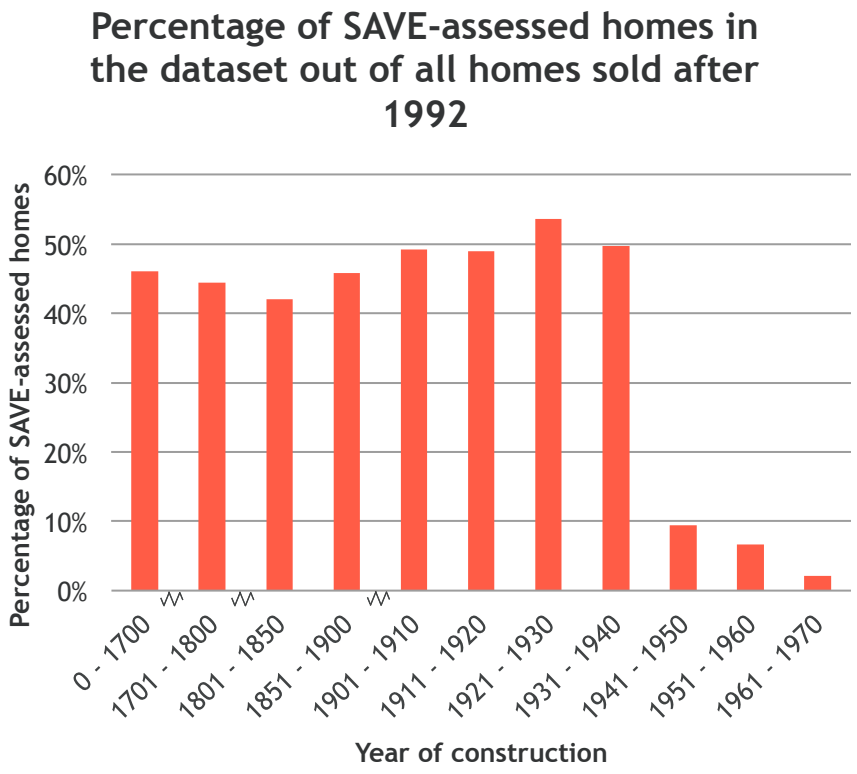
In order to make the prices more comparable and representative of the value of the home, we have not included holiday homes, cooperative flats, etc., just as we always use property prices per m^2 as our basis for comparison.

All sales prices in the analysis have been converted to 2014 prices using regional price indices. The price indices have been drawn up on the basis of all sales prices in the data set.

Sales of SAVE-assessed homes

Just over one-half of all SAVE-assessed homes have been traded since 1992.

Not so many homes built after 1940 have been assessed under SAVE. This is because most SAVE assessments were made when the municipal atlases were produced and these only assessed buildings built before 1940.



2.2 ALL OF DENMARK

Results from the property market

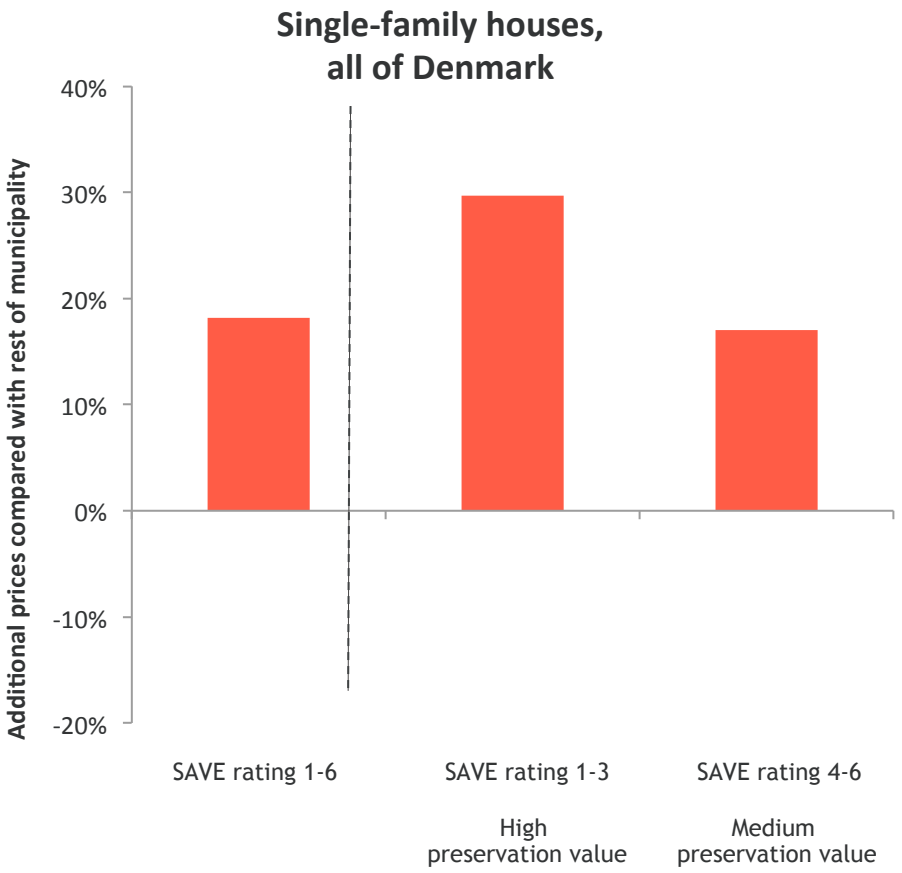
Preservation-worthy single-family houses have higher value

The graph to the right shows that preservation-worthy single-family houses are sold at higher prices.

On average, they are sold for an 18% higher price per square metre than the average for other single-family houses in a municipality.

The single-family houses with a high preservation value (SAVE rating 1-3) are sold at prices 30% higher per square metre than the average for a municipality.

Listed homes are not included.



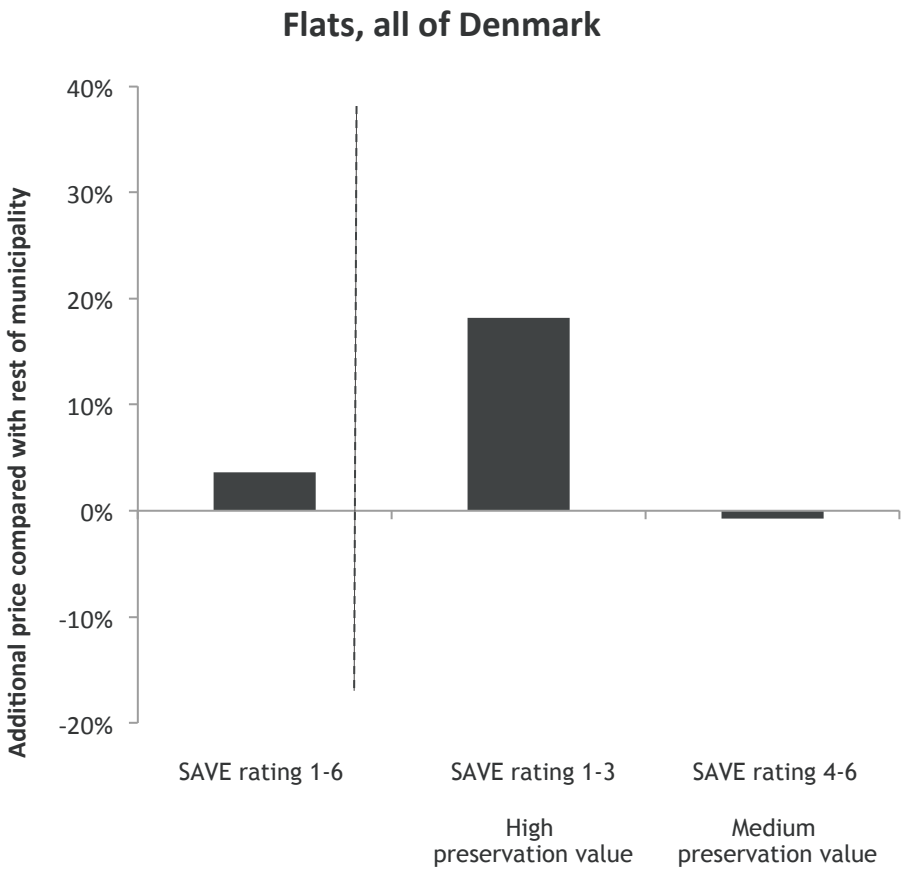
Preservation-worthy owner-occupied flats have higher value

The graph to the right shows that owner-occupied flats are sold at higher prices.

On average, preservation-worthy owner-occupied flats are sold for a 4% higher price per square metre than the average for other single-family houses in a municipality.

With regard to owner-occupied flats, homes with a preservation value of 1, 2 or 3 have an added value. They are sold for an 18% higher price per square metre, while owner-occupied flats with a preservation value of 4, 5 or 6 are sold for around the same price as not-preservation-worthy owner-occupied flats.

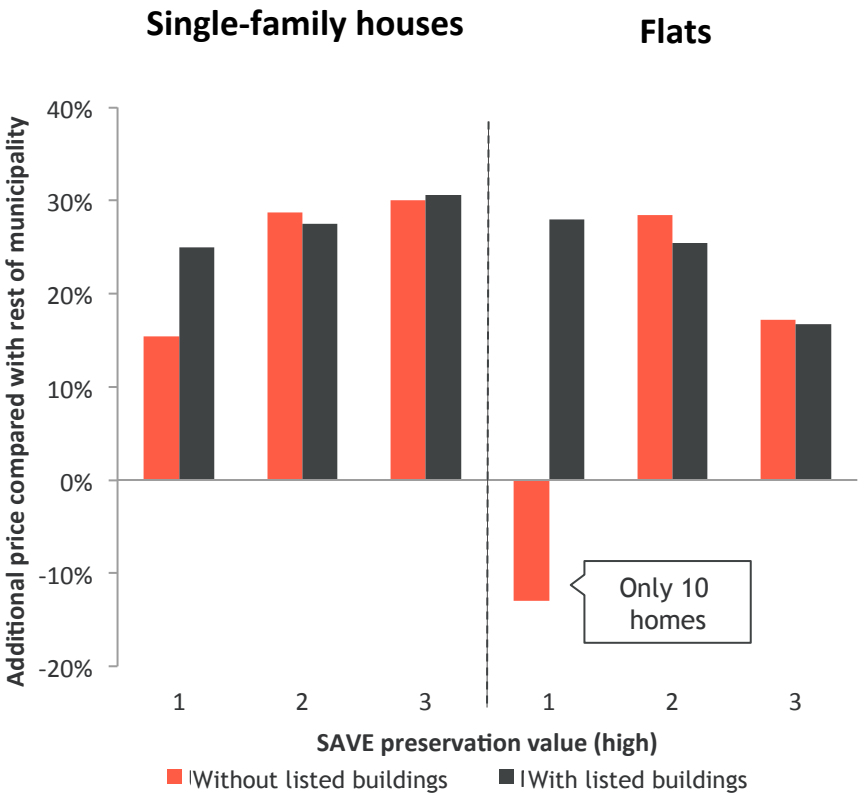
Listed homes are not included



Listed buildings

As many as 97% of listed homes have been assessed to have a high preservation value (SAVE rating 1-3). There is a total of around 9,000 listed homes in Denmark.

The most preservation-worthy listed homes are sold at a higher sales price. This applies in particular to flats.



The value for neighbours

The greater the number of preservation-worthy buildings in the local area, the higher the sales price will be for an ordinary, not-preservation-worthy home.

The same effect applies for both single-family houses and flats.

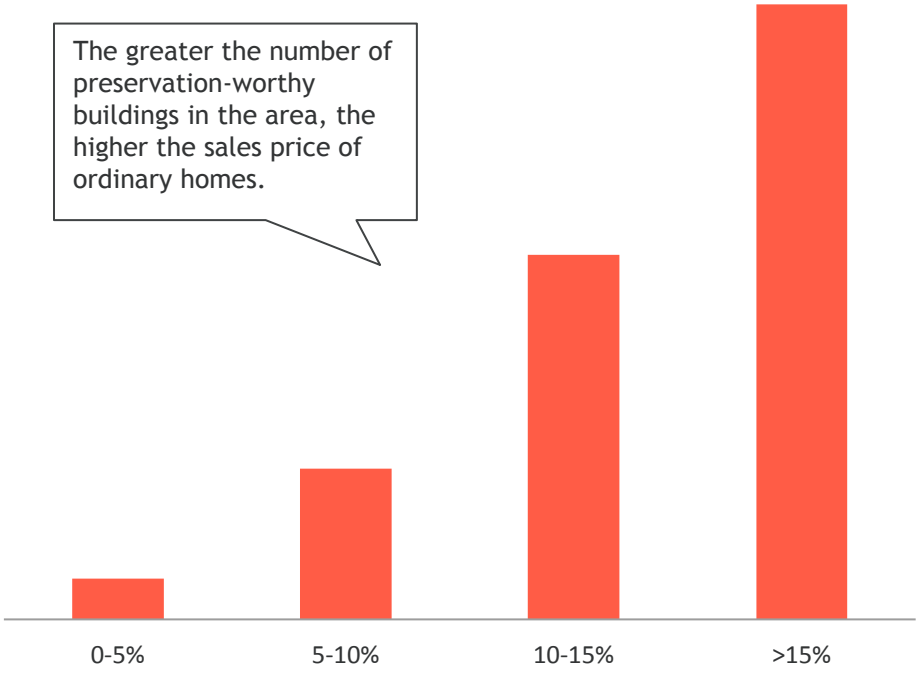
Definitions

We have here only included homes with a high preservation value (SAVE rating 1, 2 or 3).

A home's local area is defined on the basis of squares of 1km x 1km.

The value for neighbours

Additional price for non-SAVE assessed homes in areas with preservation values compared with other non-SAVE-assessed homes in the municipality.



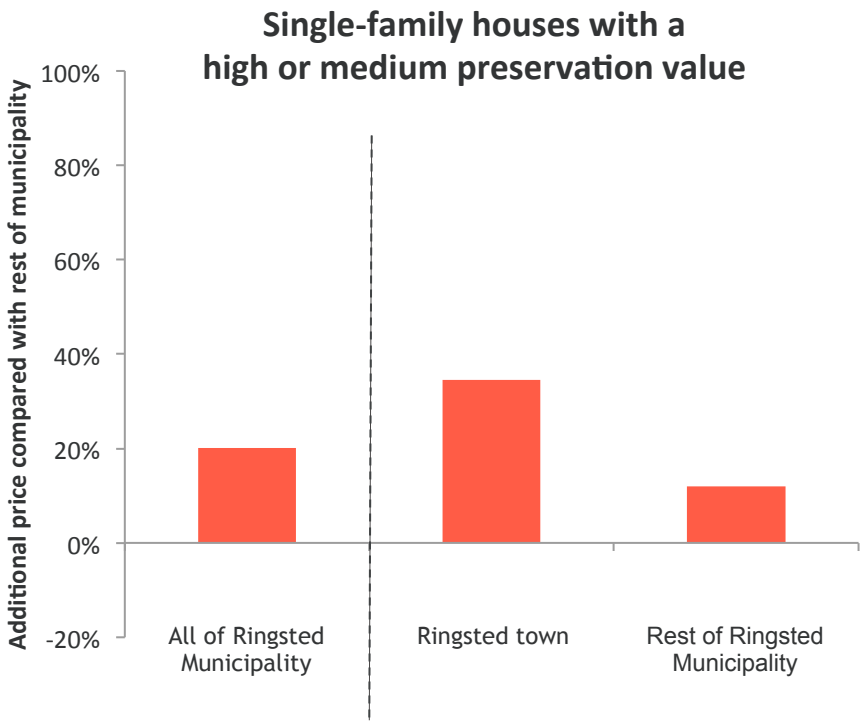
Percentage of high-preservation-value buildings in an area.

The same conclusion applies for single-family houses

Single-family houses with a high or medium preservation value are sold at higher square-metre prices than similar single-family houses.

We tested whether this result is only due to the fact that preservation-worthy homes have superior locations. This is not the case.

Take Ringsted Municipality, for example. We divided homes according to whether they are located in the town of Ringsted or elsewhere within the municipality. Preservation-worthy single-family houses are worth more in both areas.

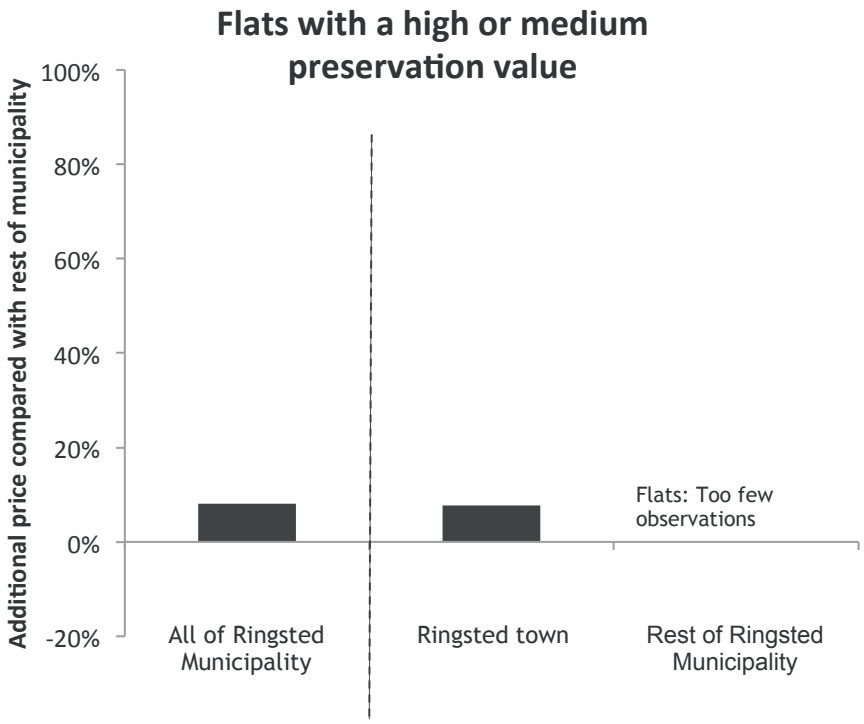


The same conclusion applies to owner-occupied flats

Owner-occupied flats with a high or medium preservation value are sold at higher square-metre prices than similar homes.

We tested whether this result is only due to the fact that preservation-worthy owner-occupied flats have superior locations. This is not the case.

Take Ringsted Municipality, for example. We divided owner-occupied flats according to whether they are located in the town of Ringsted or elsewhere within the municipality. Preservation-worthy owner-occupied flats are worth more in both areas.



2.3 SIX CASES

Results from the property market

Criteria for cases

On the basis of six cases, we here compare house prices of preservation-worthy and listed homes with prices of comparable homes which have not been assessed to be preservation-worthy by the Danish Agency for Culture.

Realdania selected the cases in collaboration with Dansk Bygningsarv A/S. The following parameters were used when selecting the six cases:

+ All of the locations have at some time seen initiatives to preserve or develop the built heritage.
+ The locations are ditributed across all of Denmark.
+ Both large cities and small towns are represented.
+ We have generally chosen hostoric heritage environments and areas that are no more unique and spectacular than similar areas located in many places throughout Denmark.

Initiative

In the marshland of southern Jutland between the cities of Ribe and Tønder lies the village of Ballum with its old farms and its wide and open countryside.

Tønder Municipality, the Heritage Agency of Denmark and the A.P. Møller Fonden charitable foundation partnered up to establish a preservation fund. The objective of this fund was to contribute to preserving and improving the buildings in Østerende Ballum and Vesterende Ballum and to return the houses to their original appearance.

The special initiative

A five-year initiative to refurbish the village and safeguard its heritage values ended in 2014. A total of 45 home owners received financial support totalling DKK 21.3 mill. to renovate the exterior of their houses.

Impact

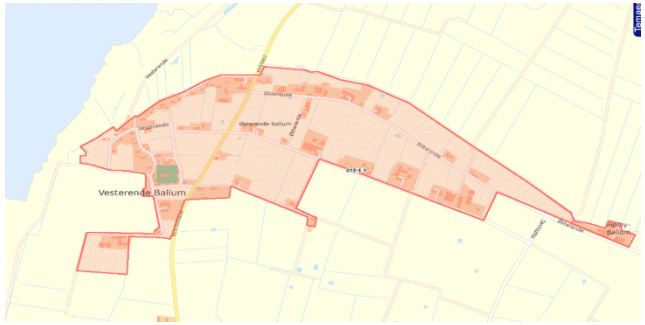
We compared developments in Ballum before and after the initiative with developments in the closest village south of Ballum.

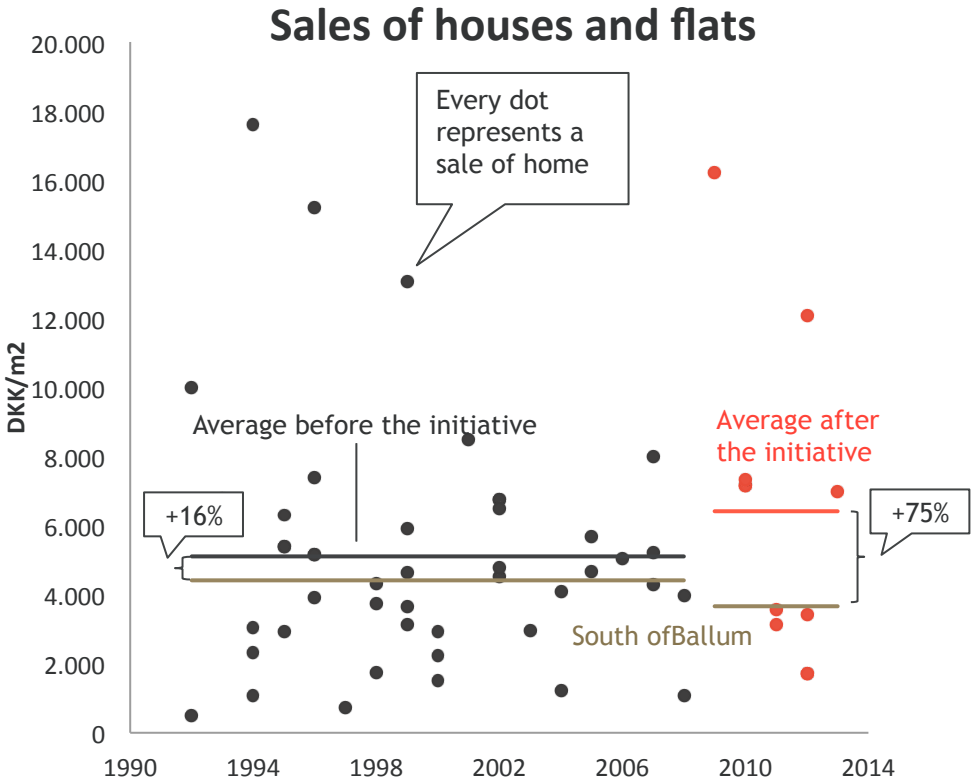
Before the initiative, house prices were slightly higher in Ballum, whereas after the initiative they were considerably higher.

Before the initiative home prices were on average 16% higher in Ballum than in the nearby village just south of Ballum. After the initiative, home prices in the same area were 75% higher.

The impact is uncertain, as only 11 houses were traded in the period after the initiative. It cannot be concluded whether the initiative has had an impact.

Initiative





Note: 133 dots for ”South of Ballum” are not shown

Initiative

Christiansfeld was founded in 1773. The city centre has a special layout because it was planned around a central square and two parallel streets. Christiansfeld has been on UNESCO's World Heritage Tentative List since 1993.

In 2002, Denmark's largest privately-funded urban preservation project was commenced in Christiansfeld with a total budget of DKK 175 mill.

The objective of the renewal project was to preserve the historic city centre. Specific restoration works were accompanied by a local development plan from 2009, which sets out the legal framework for preservation, among other things.

The special initiative

The initiative included:

+ New paving on the Kongensgade street.
+ Comprehensive renovation of significant buildings, including a bakery, hotel and shops.
+ New layout of the central Praetorius Square.
+ Initiative aimed at building facades.
+ A new local development plan which was adopted in 2009, and which aims to preserve the citycentre and safeguard historic values. Amongst other things, the plan safeguards the preservation-worthy buildings in a legal context and stipulates rules for building preservation.

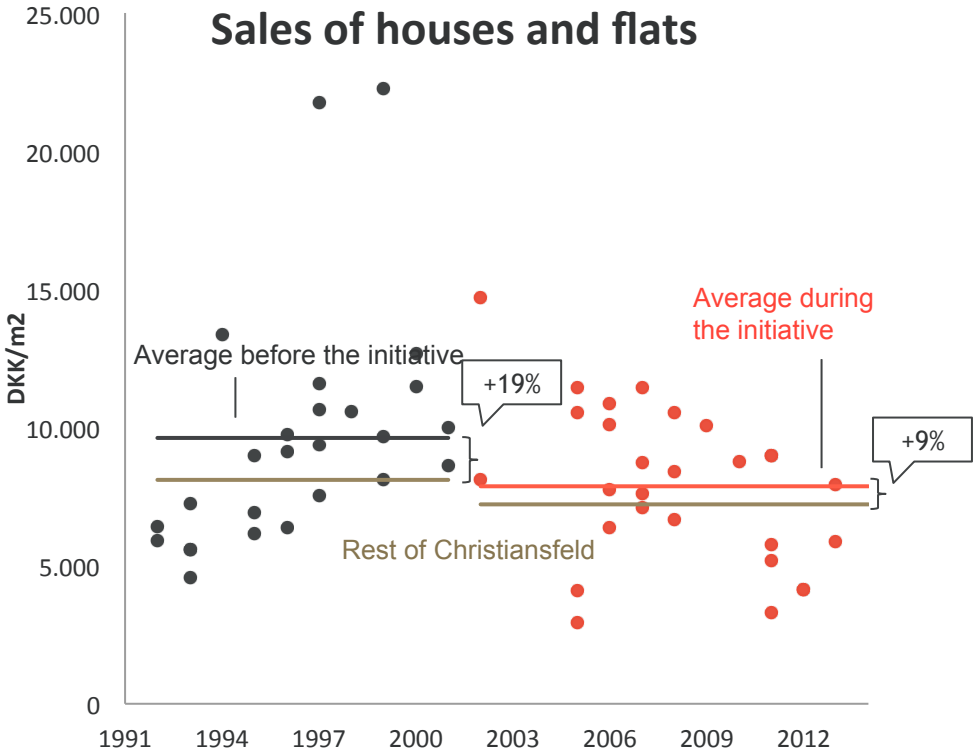
Impact

We compared developments in the area covered by the initiative before and during the initiative with developments in the rest of Christiansfeld.

Before the initiative, home prices were on average 19% higher in the area covered by the initiatives than in the rest of Christiansfeld. In the period 2003 to 2014, home prices were 9% higher in the same area.

The reason for this could be that the preservation project did not end until in 2014. The lower additional price up to 2014 could therefore be due to nuisance caused by implementation of the preservation project.

Initiative



Note. 607 dots for the rest of Christiansfeld are not shown

Initiative

The districts of Hasseris Villaby and Klostermarken are among the most attractive districts in Aalborg, because the houses here represent excellent architectural craftsmanship and many different architectural styles, from historicism to modernism.

The area contains around 1,300 properties and is also characterised by large gardens and recreational areas, making Hasseris something of a garden suburb.

The special initiative

The local development plan "Hasseris - Bevar Mig Vel" ("Hasseris - preserve us!") from 2006 is one of several initiatives which have bolstered collaboration between the municipality and residents to preserve the built heritage.

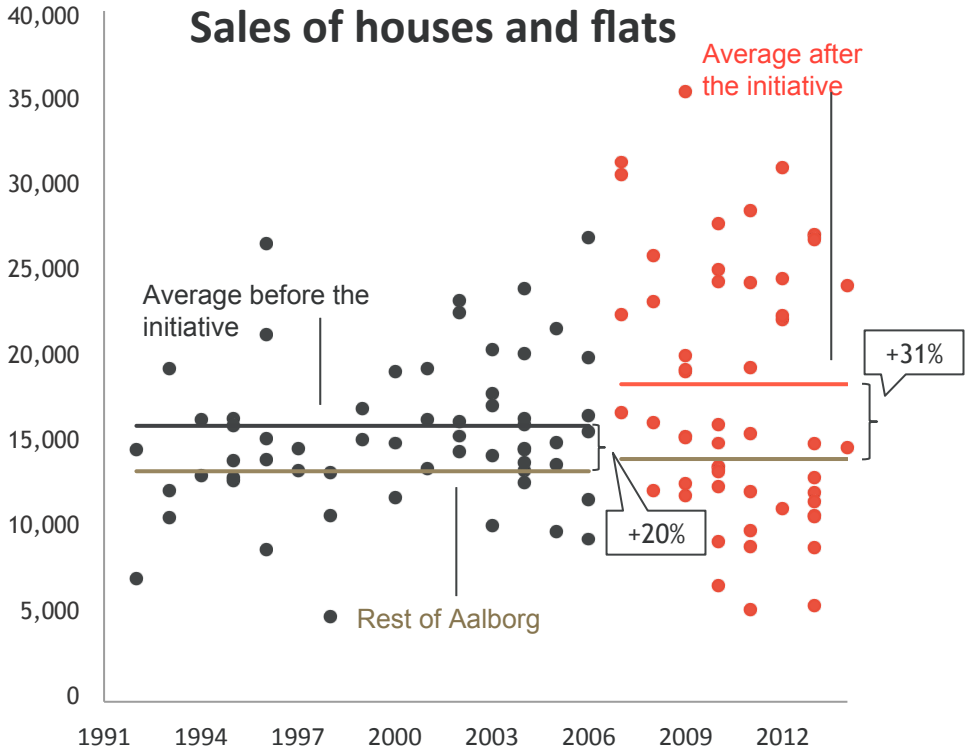
The local development plan provides information for residents about the cultural history of the area and it provides guidance on materials and techniques to preserve the characteristics of building styles.

Impact

We compared developments in Hasseris before and after the initiative with developments in the rest of Aalborg.

Before the initiative house prices were on average 20% higher in Hasseris than in the rest of Aalborg. After the initiative prices in Hasseris were 31% higher.

Initiative



Note. 8,716 dots for the rest of Aalborg are not shown

Initiative

Lønstrup is an old fishing village on the west coast of North Jutland. The village boasts a fine view of the coast and has developed into a popular holiday spot. Attractive and architecturally well designed holiday homes are advantageously located on the steep coastal slope.

The special initiative

In 2004, the local preservation plan was revised. A number of holiday homes were designated as preservation-worthy, and a number of restrictions were introduced on use and maintenance. For example, the town centre was limited to year-round residences, and there are several, very detailed and specific guidelines for colouring, materials, building components and signage.

The local preservation plan also touches on more general aspects such as preservation of the characteristic winding paths.

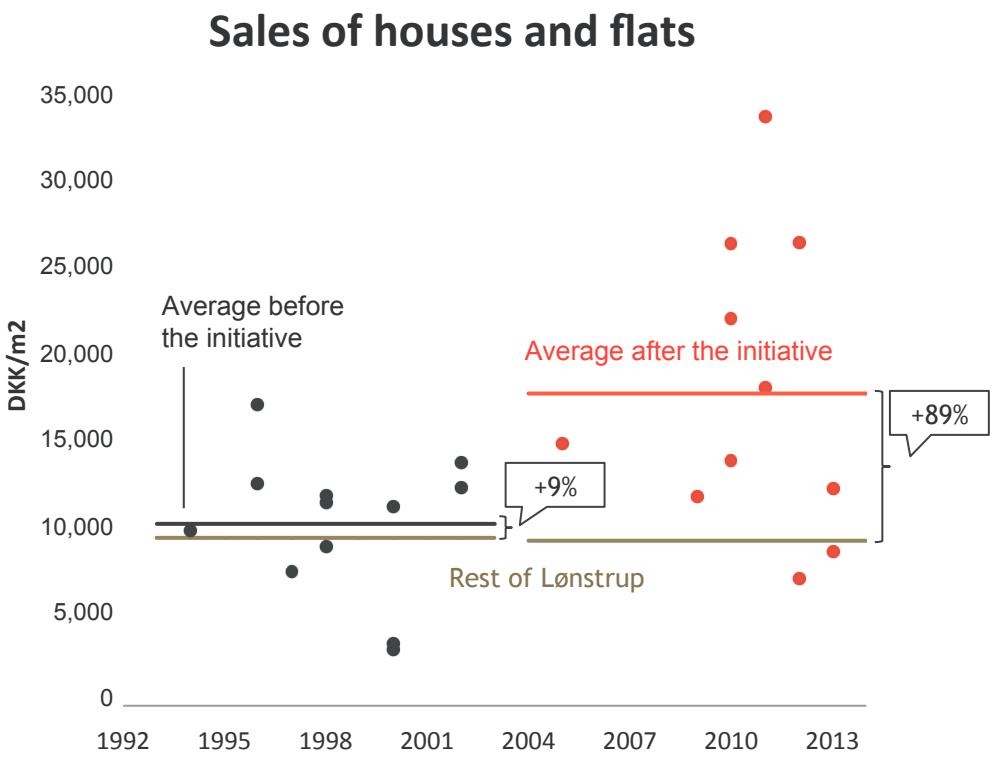
Impact

We compared developments in the area covered by the initiative before and after the initiative with developments in the rest of Lønstrup.

Before the initiative, home prices were on average 9% higher than in the rest of the area. After the initiative they were 89% higher.

The impact is uncertain, as only 31 houses were traded in the period 1992 to 2013.

Initiative



Note. 118 dots for the rest of Lønstrup are not shown

Initiative

The beautiful merchant's houses in Svaneke on the island of Bornholm are an important part of the history of the town, and they create identity and a sense of pride in residents. For many years, the local community has taken large part of the responsibility for maintaining the built environment.

The special initiative

The residents of Svaneke have a long tradition of building preservation. The association "*Svanekes Venner*" (friends of Svaneke) was established in 1944 with objectives to protect the homogeneity and harmony of the town's built environment, to ensure urban development which respects the existing urban environment as a valuable framework around the life of the city's residents and finally to preserve the town's heritage.

Since 1983, the preservation fund has been granting smaller amounts for private preservation projects and prizes are awarded to owners who have made exceptional efforts.

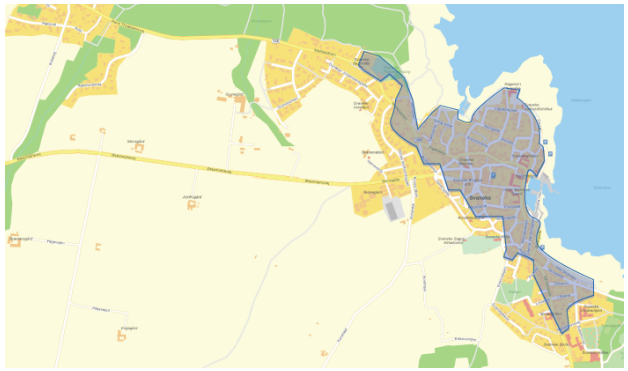
Impact

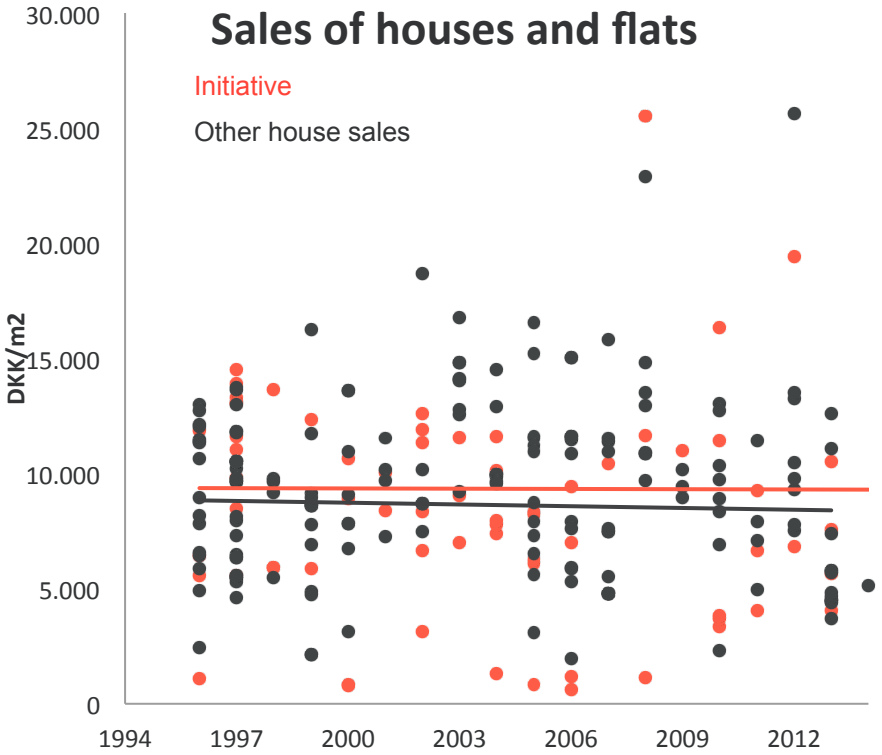
We compared developments in the area of Svaneke covered by the initiative with developments in the rest of Svaneke.

There is no clear difference in developments in the two areas.

A possible explanation for this is the generally large number of preservation-worthy homes on Bornholm. Another explanation could be that the rest of Svaneke has also benefitted from the initiative through a 'neighbour effect', as described in section 2.2.

Initiative





Initiative

Troense on the island of Tåsinge is an old town with an extraordinarily low number of more modern buildings. The original urban environment, which is centred around the harbour, can still be enjoyed and is dominated by the many well-preserved, and often half-timbered, traditional Danish “long houses”. The town contains 90 listed buildings and a number of buildings worthy of preservation. The majority of these buildings are well preserved and make for a charming village environment framed by a beautiful vista of the Thurø Sound.

The special initiative

As early as 1976, the Municipality of Svendborg drew up a bylaw for a town development plan to promote the town’s heritage and architectural values. The by-law was among the first municipal legislative preservation initiatives in Denmark and it has secured preservation of the town for many years. In 2006, the by-law was followed up by a local preservation plan to further secure the historical footprint of the town.

The well-preserved half-timbered houses in the Grønnegade and Strandgade streets are popular year-round residences. Since 2004, special initiatives have been completed to renovate 13 houses.

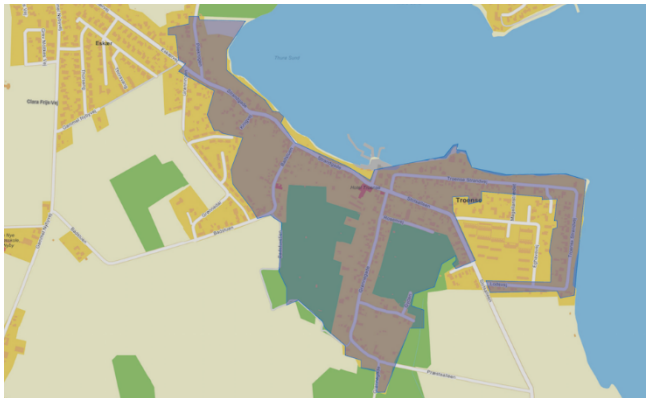
2.3 CASE 6: TROENSE

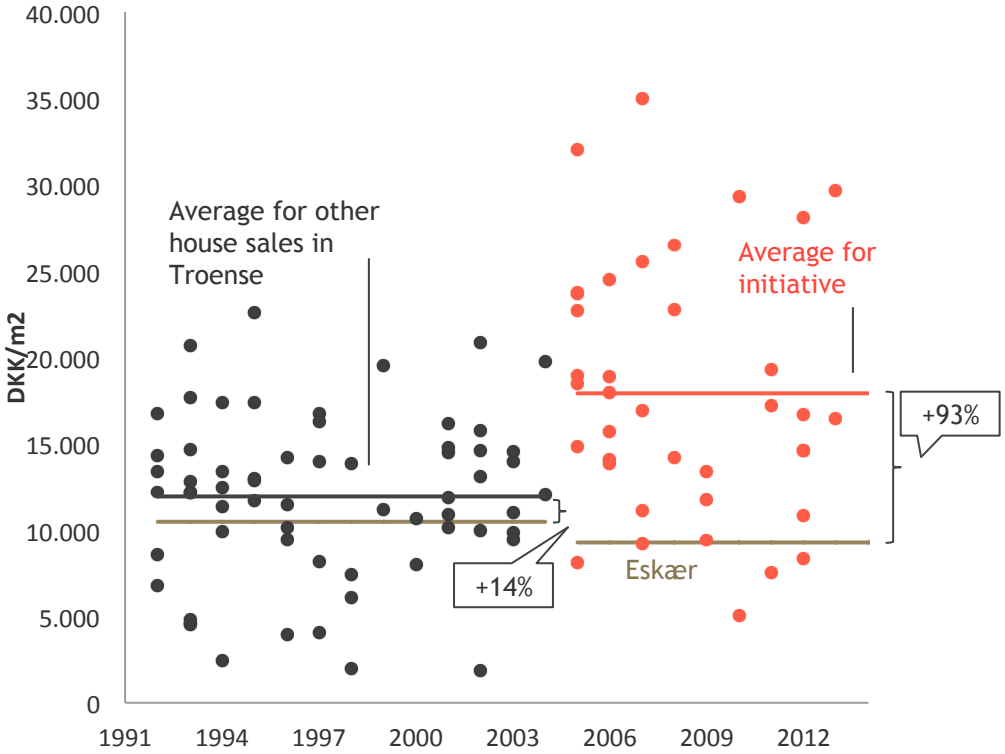
Impact

We compared developments in Troense before and after the initiative with developments in the adjacent Eskær.

While house prices before the initiative were on average 14% higher than in the adjacent Eskær, after the initiative they were 93% higher.

Initiative





Note. 137 dots for Eskær are not shown

THE VALUE OF THE BUILT HERITAGE

Section 3 Ribe

Background

In this section we zoom in on Ribe, adding figures to the coloured elements in the value map to the right, which we introduced in section 1.

Ribe was selected as a case because the city has been working actively with its built heritage, while at the same time serving as a regional trailblazer.

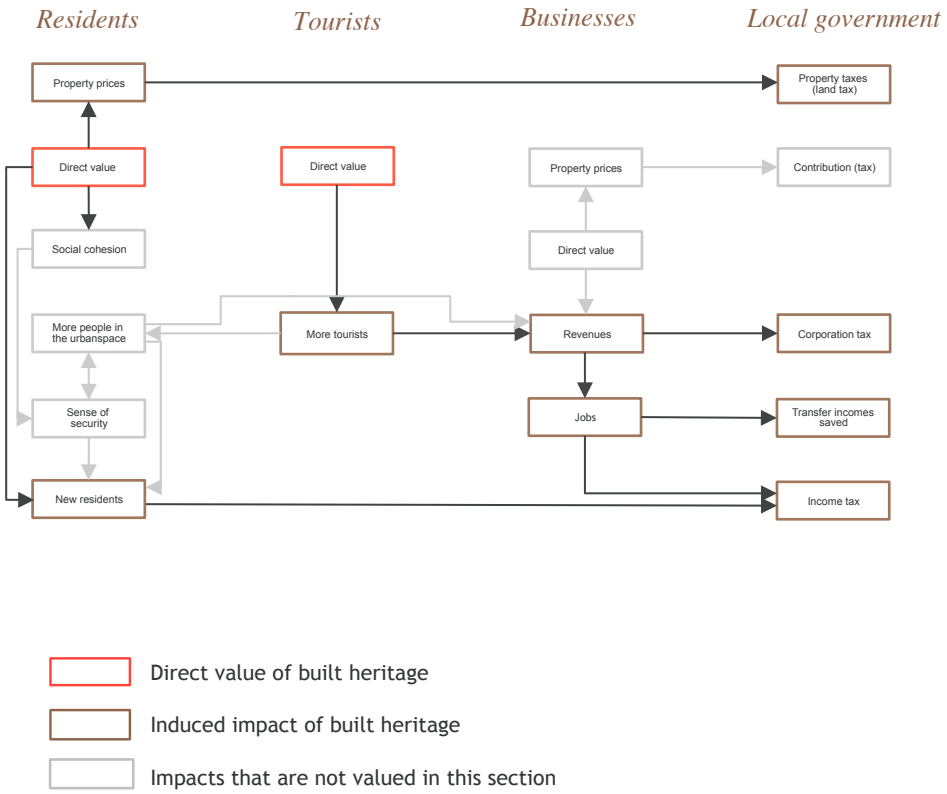
We have divided section 3 into two sub sections:

+ 3.1 Tourists
  + More tourists
  + Revenues
  + Jobs
  + Local government revenues (from income taxes and savings from fewer transfer incomes)

+ 3.2 Properties
  + New residents
  + Property prices
  + Property taxes (land tax)

There is considerable uncertainty regarding all of the estimated impacts. We present our best estimates in the following.

Value map



3.1 TOURISTS

The value of the built heritage in Ribe

3.1 HOW WE DID IT: FROM BUILT HERITAGE TO TOURISTS

Comprehensive data material

We based the analysis on the following data:

+ Tourists Commercial overnight stays from Statistics Denmark analysed by former Southern Jutland municipalities. In this context, commercial overnight stays include overnight stays in rented holiday homes, at camp sites, in hotels, holiday centres and hostels.
+ Preservation-worthy buildings from the Danish Agency for Culture. We only included listed homes and homes with a high preservation value (SAVE rating 1, 2 or 3).
+ We included all of the former Southern Jutland municipalities with SAVE-assessed homes. The municipalities are shown in the graph two pages further on.
+ Other literature on tourists in Southern Jutland, e.g. in connection with tourist attractions.
+ Measurement of camp sites by the coast in Southern Jutland on the basis of maps.
+ Interviews with key people in Esbjerg Municipality and in Ribe.

Thorough analysis work

We tested a large number of hypotheses explaining the differences in tourist numbers.

We ended up making the following adjustments:

+ We removed overnight stays on camp sites situated by the coast, as guests come here primarily for other reasons than the local built heritage.
+ We only included preservation-worthy buildings within a radius of 1km from the city centre. We did so based on the theory that tourists are drawn to urban environments and not to isolated preservation-worthy buildings in suburban areas.
+ We used a total 'measurement of preservation value' in an area calculated as: the sum of buildings with a high preservation value (SAVE rating 1, 2 or 3) plus the sum of listed buildings.

3.1 HOW WE DID IT: FROM TOURISTS TO ECONOMIC IMPACT

Comprehensive data material

We based our calculations of revenues and number of jobs on key figures from VisitDenmark.

We adjusted these figures for revenues per tourist and jobs on the basis of:

+ The percentage of foreign tourists in Ribe.
+ The percentage of tourists that stay on camp sites in Ribe.
+ The percentage of employees in the tourism industry that are residents of Esbjerg Municipality.

Local government revenues are based on key figures from the Ministry of Employment and refer to an average Danish municipality.

Furthermore, we have supplemented with other literature, e.g. commuter statistics to decide whether additional jobs also generate additional tax revenues locally.

Thorough analysis work

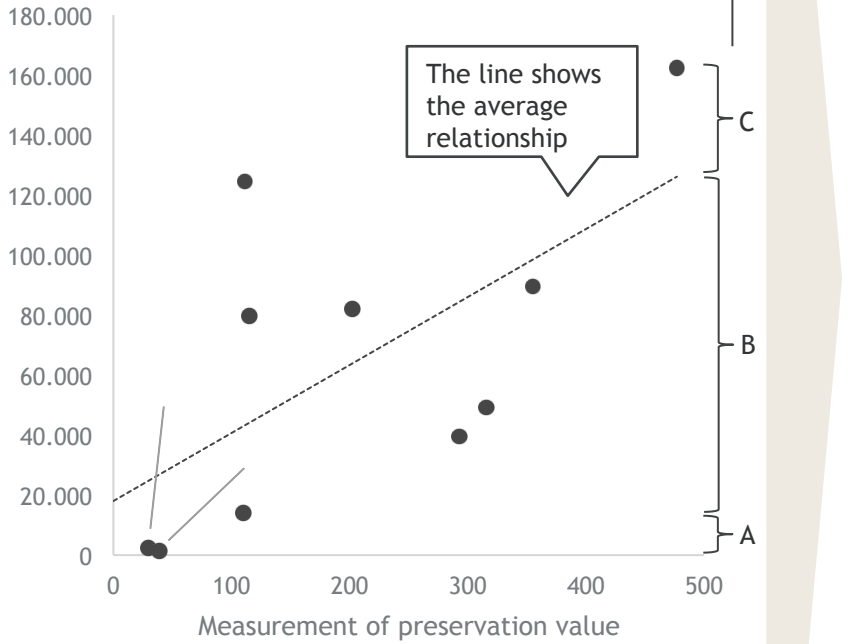
On the basis of the number of tourists in Ribe because of the city's built heritage, we have calculated the significance of the built heritage for:

+ Revenues from tourists
+ Jobs
+ Local government revenues

3.1 BUILT HERITAGE ATTRACTS TOURISTS

The figure shows overnight stays by tourists and the preservation value of the buildings for each of the former municipalities in Southern Jutland for which we have data. The dotted line shows the number of tourist overnight stays that on average can be attributed to preservation-worthy buildings.

Preservation-worthy buildings attract tourists



2/3 of overnight stays in Ribe due to the built heritage

B: Average number of tourists visiting because of the built heritage.
A+C: Number of tourists that are not visiting because of the built heritage.

$B/A+B+C =$ **2/3**

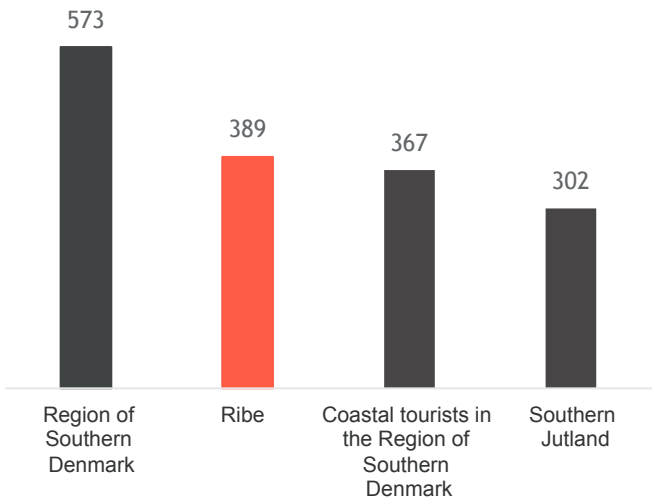
On the basis of the figure to the left, we calculate that two-thirds of all overnight stays by tourists in Ribe can be attributed to preservation-worthy buildings.

Source: Statistics Denmark (overnight stays) and the Danish Agency for Culture (preservation value). Note: Overnight stays are commercial stays less coastal camp sites in the former municipalities. Figures are averages for the years 2010-2013. Note: Number of buildings within a radius of one km from town centres with SAVE rating 1-3 + Number of listed buildings gives 'measurement of preservation value'. Note: The result is significant at the 5% level.

3.1 TOURISTS GENERATE INCREASED REVENUES IN RIBE

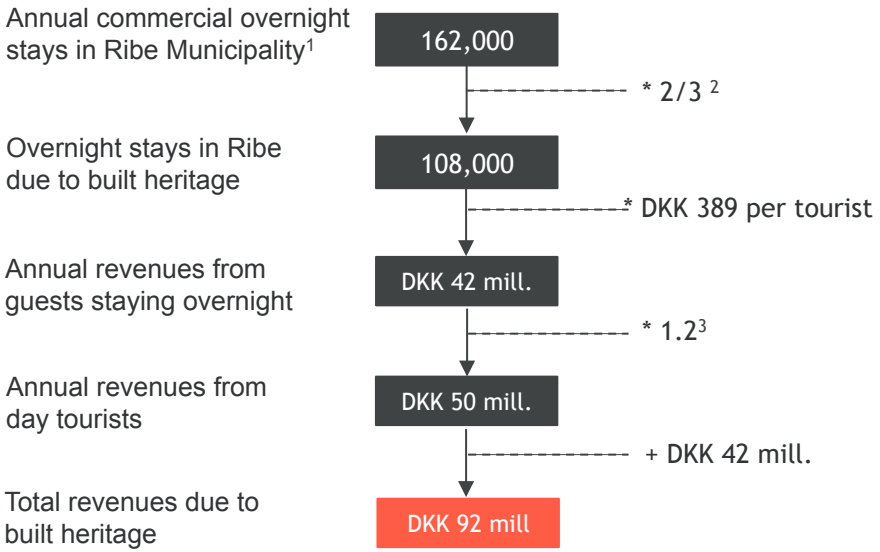
Every tourist in Ribe spends DKK 389 per day

Revenues in Ribe compared with official sources for the area (DKK/day)



Source: Incentive based on VisitDenmark.
Note: *Southern Jutland is Tønder, Haderslev, Aabenraa and Sønderborg.

DKK 92 mill. annual revenues due to built heritage



Source: [1] Incentive based on Statistics Denmark.
[2]From previous figure.
[3]Calculated on the basis of the average relationship between revenues from day tourists and guests staying overnight in Southern Jutland. Figures are based on '*Turismens økonomiske betydning i Sønderjylland*' VisitDenmark 2012.

3.1 INCREASED REVENUES LEAD TO JOB CREATION IN RIBE

Result from previous page

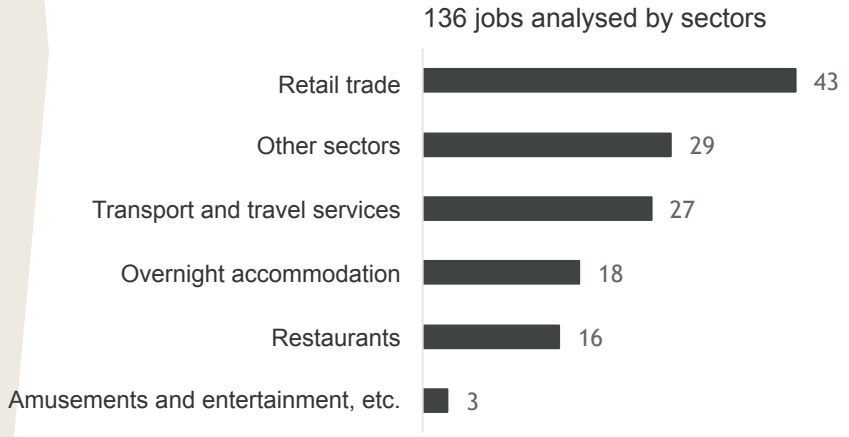
DKK 92 mill. in additional revenues due to built heritage

Based on average revenues per employee in the various business sectors in Southern Jutland, DKK 92 mill. in additional revenues lead to an additional 136 employees.

136 jobs due to increased revenues from tourists

136

136 jobs analysed by sectors



Source: Incentive based on '*Turismens økonomiske betydning i Sønderjylland*', VisitDenmark 2012.
Note: Based on the average of Tønder, Haderslev, Aabenraa and Sønderborg.

INCENTIVE

3.1 MORE JOBS MEAN MORE REVENUES FOR LOCAL GOVERNMENT

Total impact for an average municipality

Assuming those who get work are unemployed

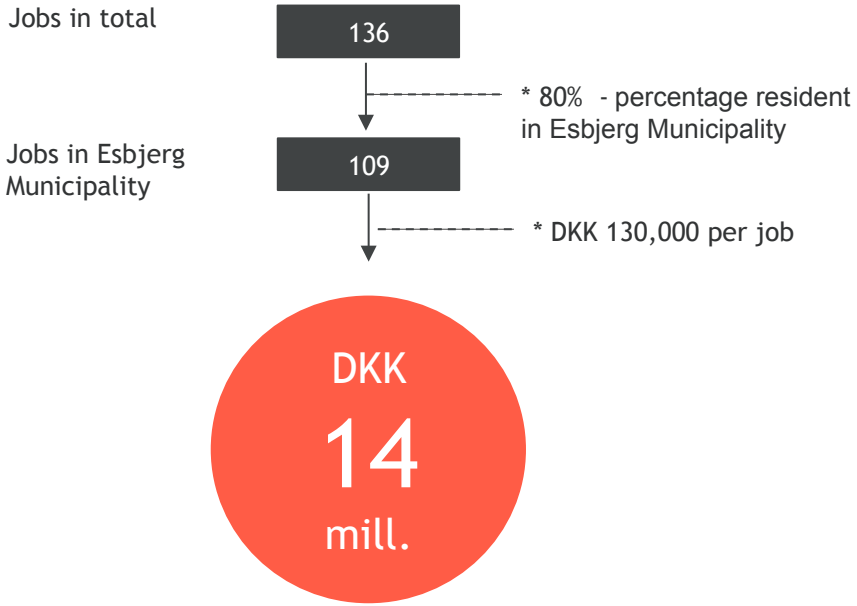
Impact on local government budget per job: DKK 130,000[1]

Free day-care Administration
Social benefits Wage subsidies
Payment by parents Income tax
Sibling subsidies Compensation
Employability enhancement

In addition to this is additional corporation tax revenue[3]

Direct impact on local government revenues: DKK 14 mill.

Jobs attributable to tourists who visit because of the built heritage



Source: Question 23 to the Employment Committee of the Danish Parliament, Ministry of Employment 2013.
Note: [1]Impact on the average municipal budget of an unemployed person getting a job (average of a recipient of unemployment benefits and social benefits). Includes costs saved on the unemployed and additional tax revenues from people in work.
Impacts on the Government block grant for the municipality are not included.

Source: [2]Interview with selected workplaces in the tourist industry in Ribe as well as commuter statistics.
[3]Income tax revenues from companies domiciled in the municipality.

3.2 PROPERTIES

The value of the built heritage in Ribe

From built heritage to property market impacts

We examined the preservation-worthy buildings from three angles:

+ Household incomes
+ Sales prices
+ Local government revenues from land tax

Household incomes

We examined household incomes on the basis of a grid of 100m^2 squares by combining these data sources:

+ Household incomes from Geomatic and Statistics Denmark.
+ Preservation-worthy buildings from the Danish Agency for Culture.
+ Official address data for all of Denmark.

We calculated the percentage share of preservation-worthy buildings in each 100m^2 square by combining the number of preservation-worthy buildings with the official address data.

Added value and land tax

We calculated the added value and land tax on the basis of the analysis in section 2 in combination with a data extract of the number of preservation-worthy homes in Ribe.

3.2 HIGHER INCOMES IN PRESERVATION-WORTHY BUILDINGS?

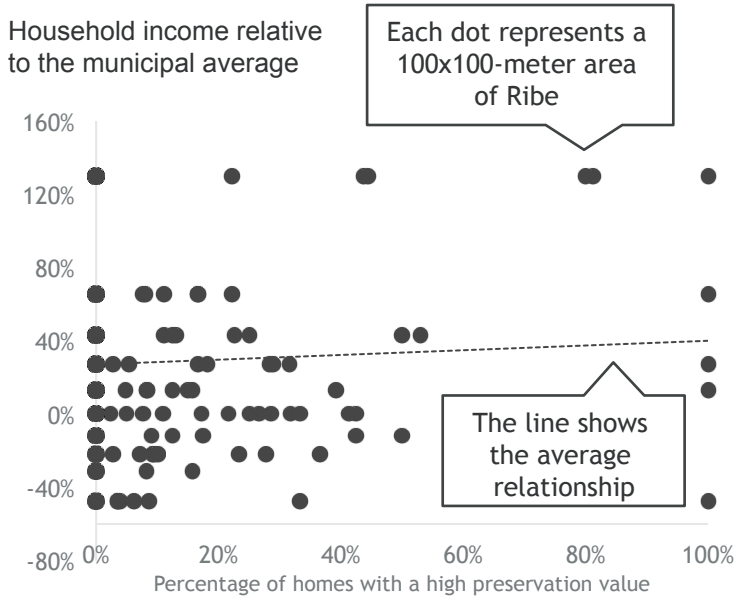
Household incomes in Ribe

We divided Ribe into 100x100-meter squares. For each square we calculated household income relative to the municipal average and the percentage of homes with high preservation value.

This means that we cannot rule out that the result could be due to random circumstances.

No statistically significant relationship

The figure below shows no relationship between homes with a high preservation value in Ribe and household incomes. Therefore, there is no basis for a hypothesis that preservation-worthy homes in Ribe attract people with higher incomes.

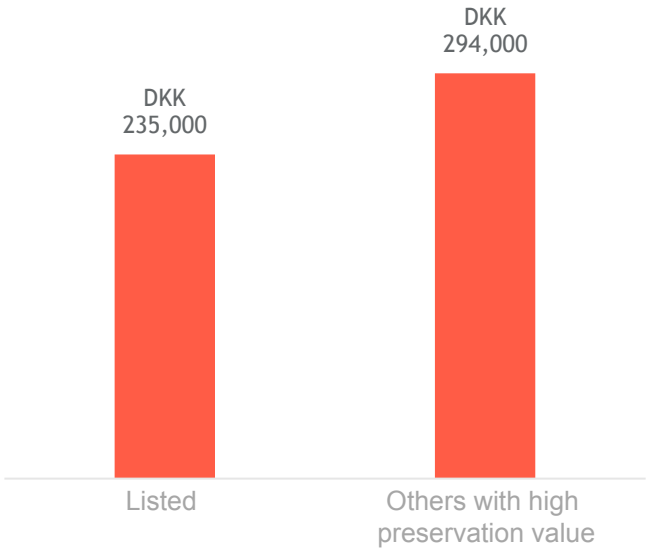


Source: Household incomes from Geomatic and Statistics Denmark. Preservation-worthy buildings from the Heritage Agency of Denmark.

3.2 PRESERVATION-WORTHY HOMES ARE WORTH MORE

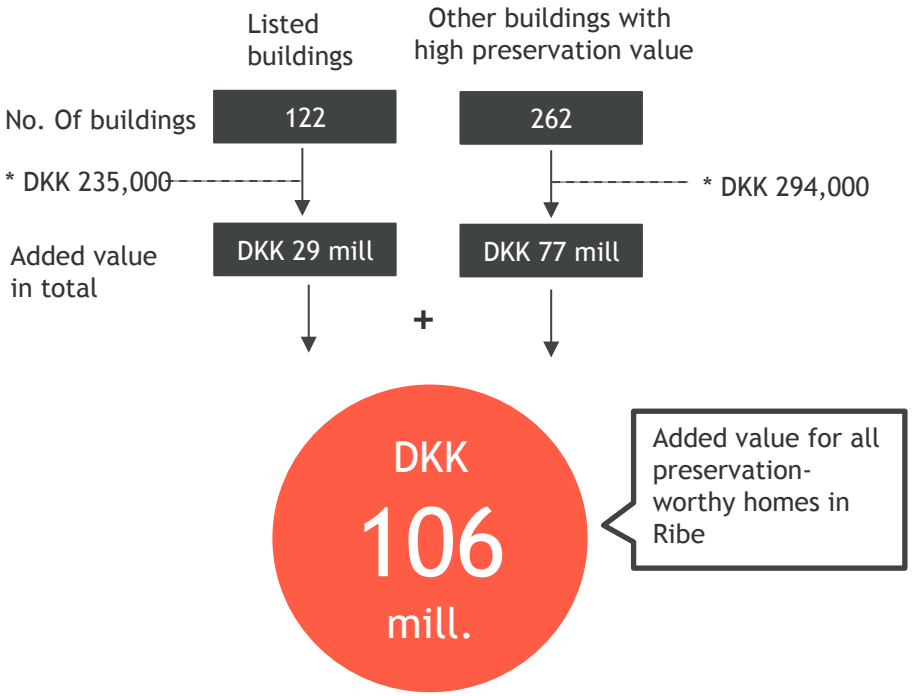
Preservation-worthy homes in Ribe have more value

Average added value of preservation-worthy homes in Ribe compared with not-preservation-worthy homes in Ribe.



Source: Based on average m² prices for Ribe, the average size of listed and other preservation-worthy homes, and the percentage added value for preservation-worthy buildings, see the results in section 2 and a separate analysis for the Ribe area.
Note: 'Others with high preservation value' are homes with SAVE rating 1-3.

DKK 64 mill. more for preservation-worthy homes



Source: [1] Incentive based on Statistics Denmark.
[2] Incentive based on '*Turismens økonomiske betydning i Sønderjylland*', VisitDenmark 2012.

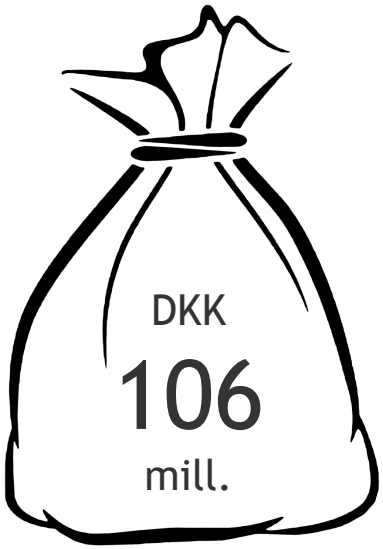
INCENTIVE

HIGHER HOUSE PRICES LEAD TO MORE MUNICIPAL TAX REVENUES

Result from previous page

Considerable uncertainty about the future property tax system

DKK 64 mill. more for preservation-worthy homes



Increased municipal revenues from land tax

Added value of preservation-worthy homes in Ribe

Added value of land with preservation-worthy homes in Ribe

DKK 106 mill

* 10% rub-off effect on land price

DKK 10.6 mill

* 2,529 percent land tax rate in Esbjerg Municipality

Considerable uncertainty

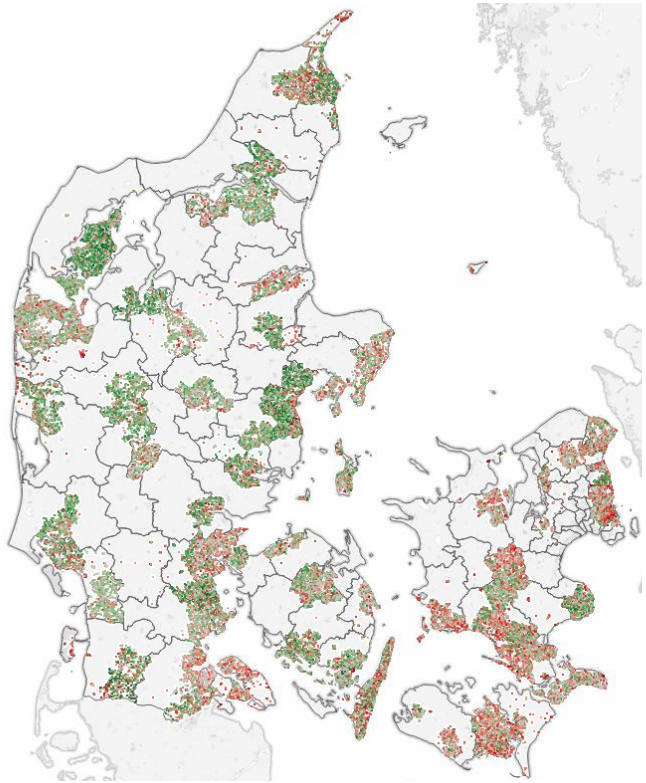
DKK
0.3
mill.

Total impact on land tax revenues

INCENTIVE

4.1 DETAILED MAPS

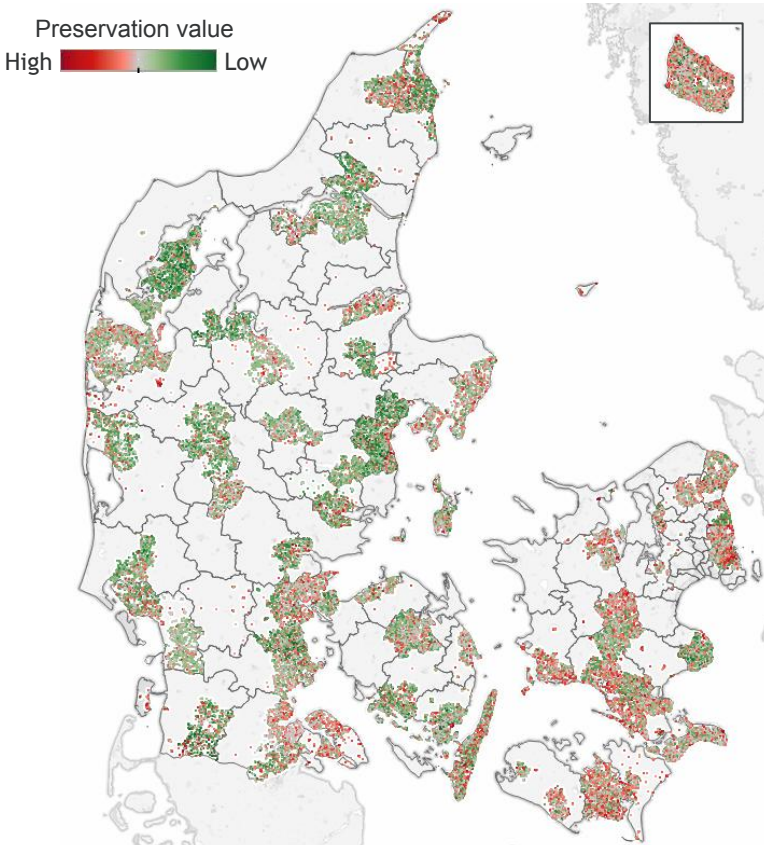
Results from the property market

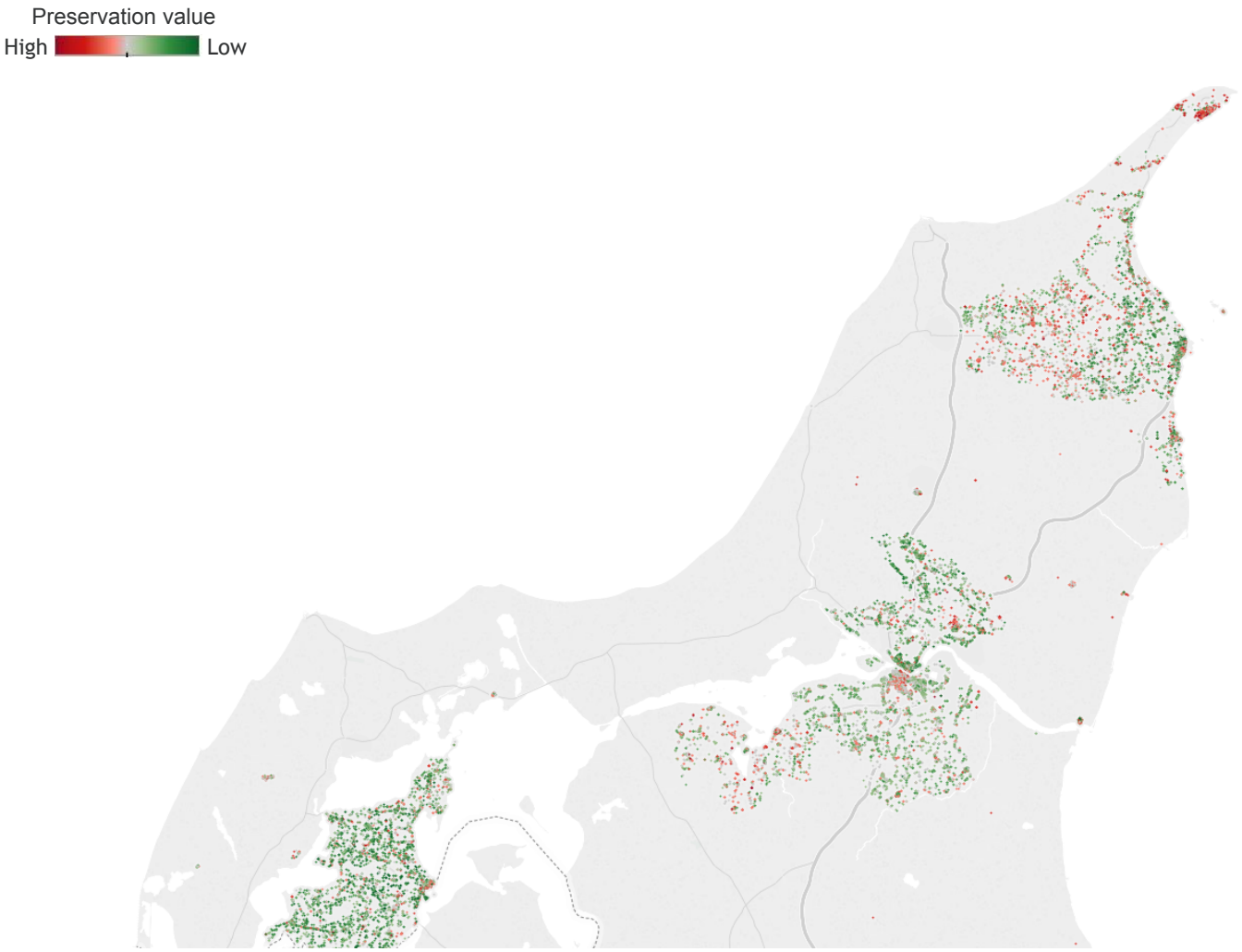


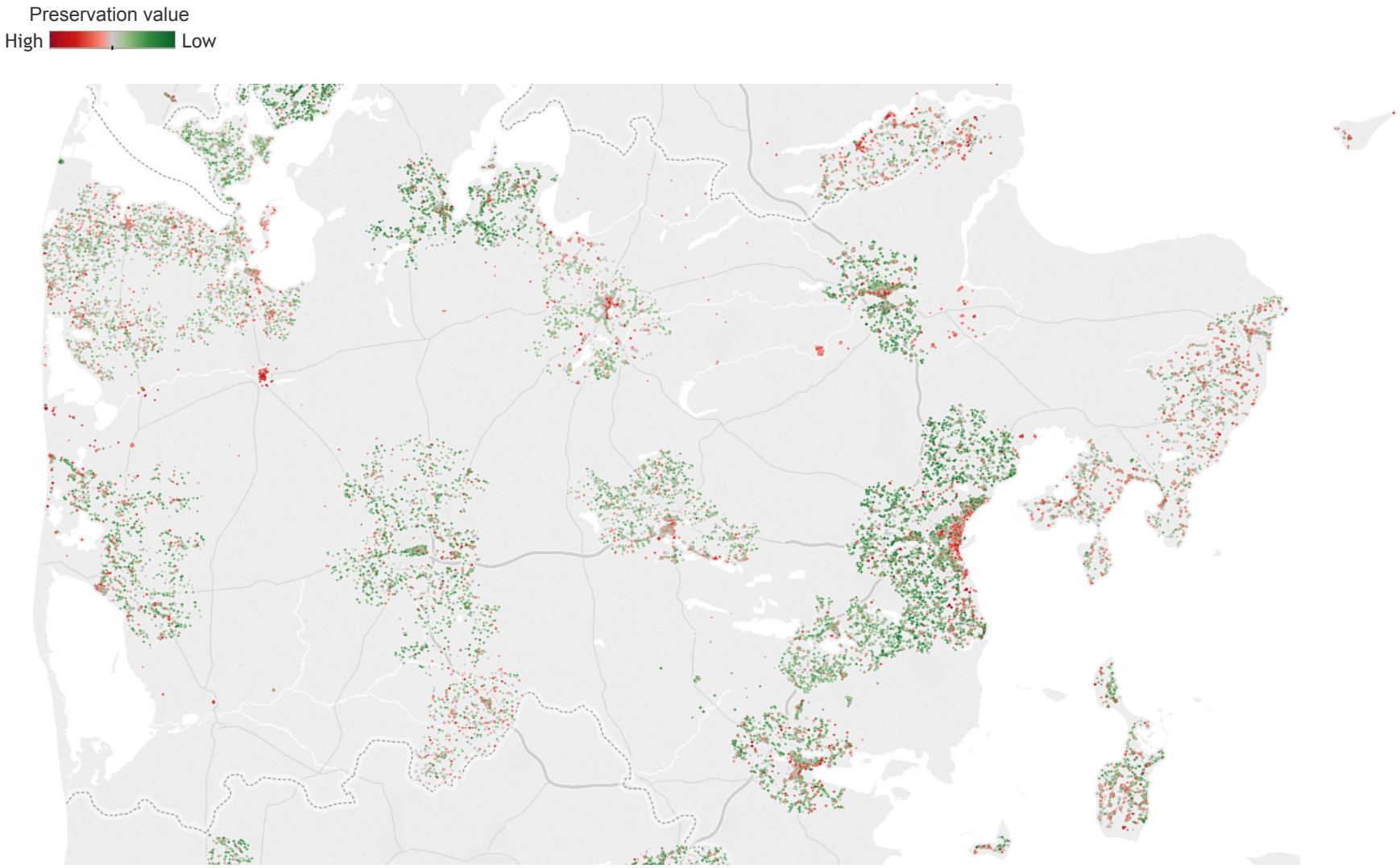
Detailed maps

The following pages contain detailed sections of the map to the right of SAVE-assessed homes.

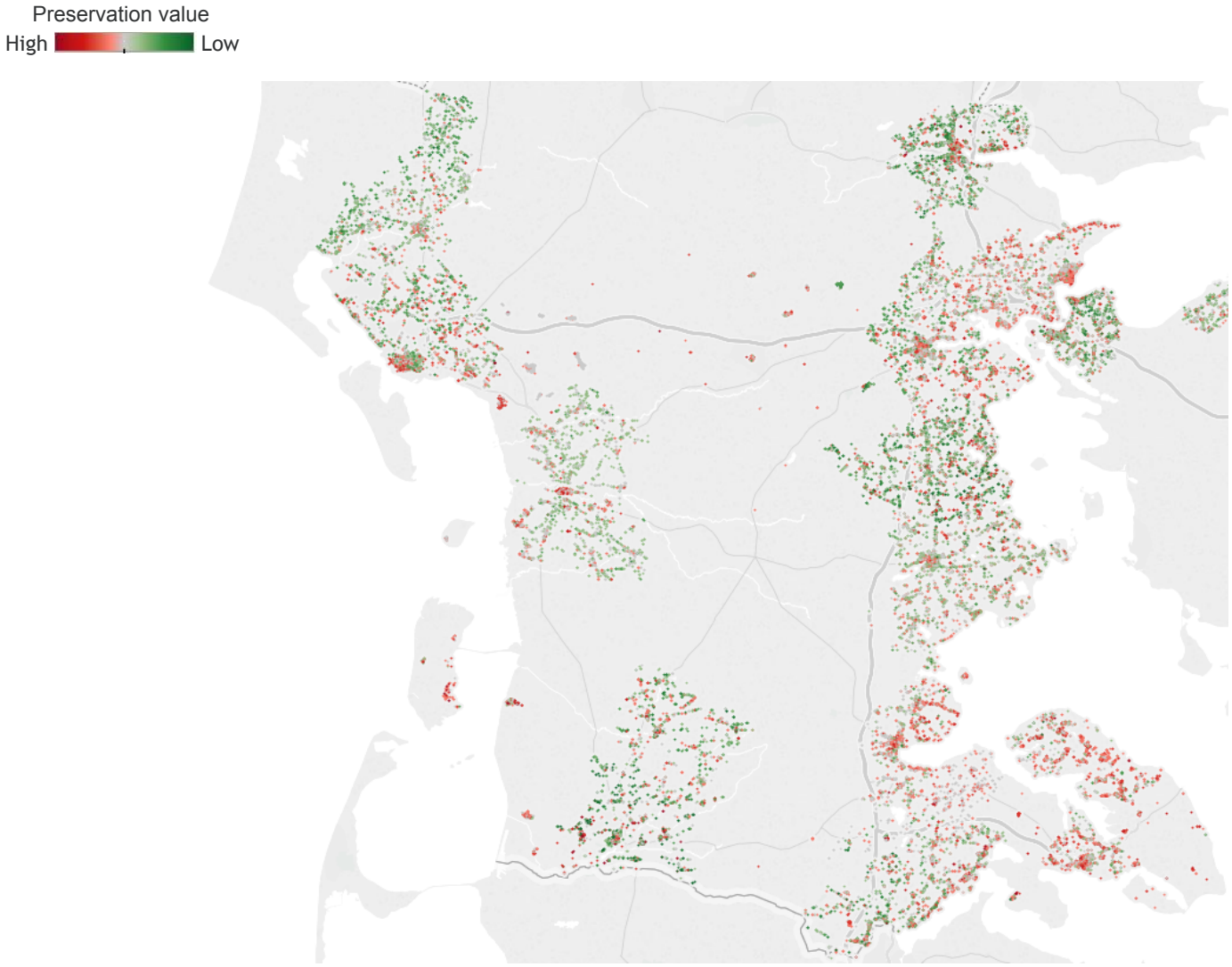
The maps shows the location of homes with high and low preservation value, respectively.



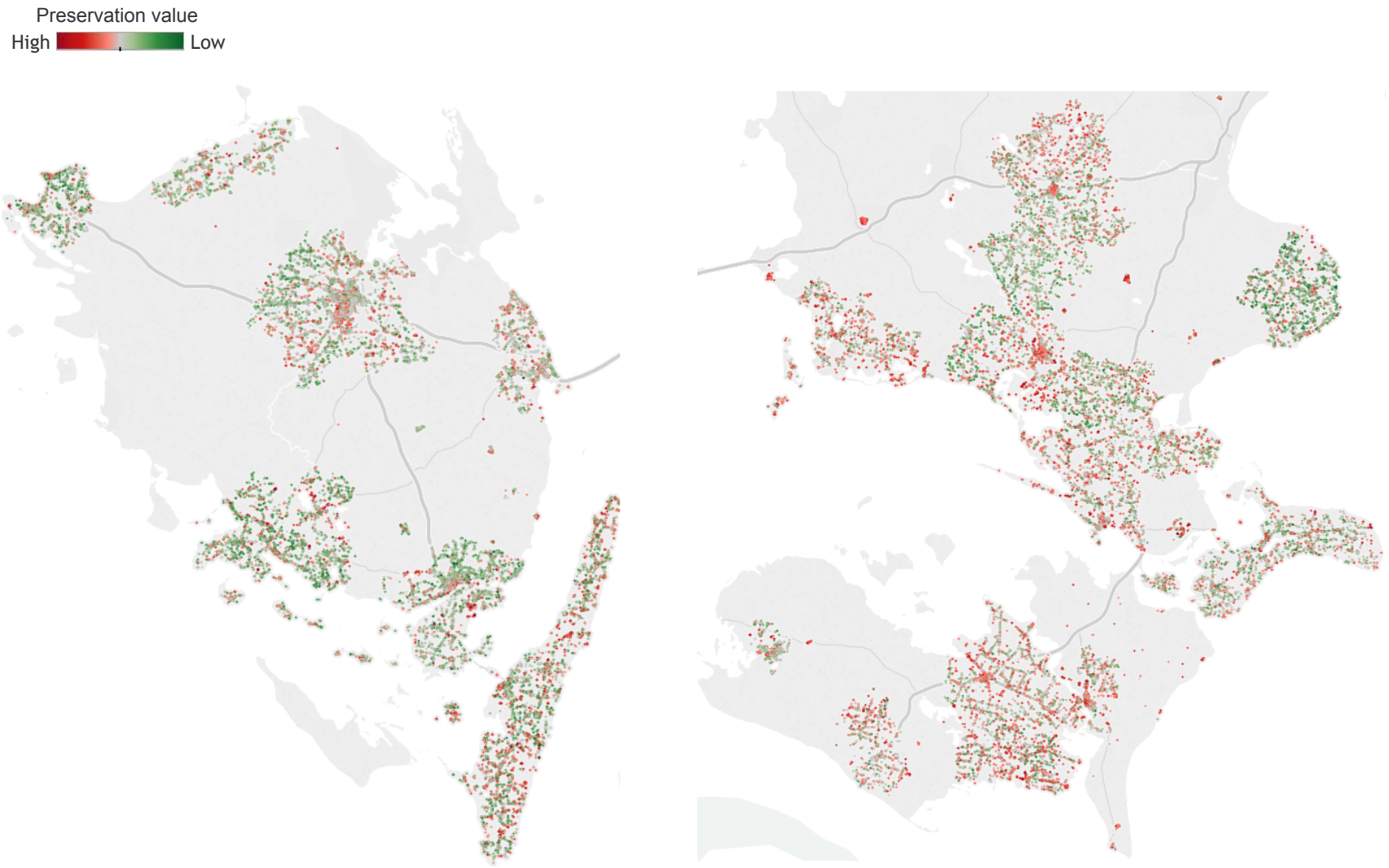

Preservation value
High
Low


Preservation value
High
Low

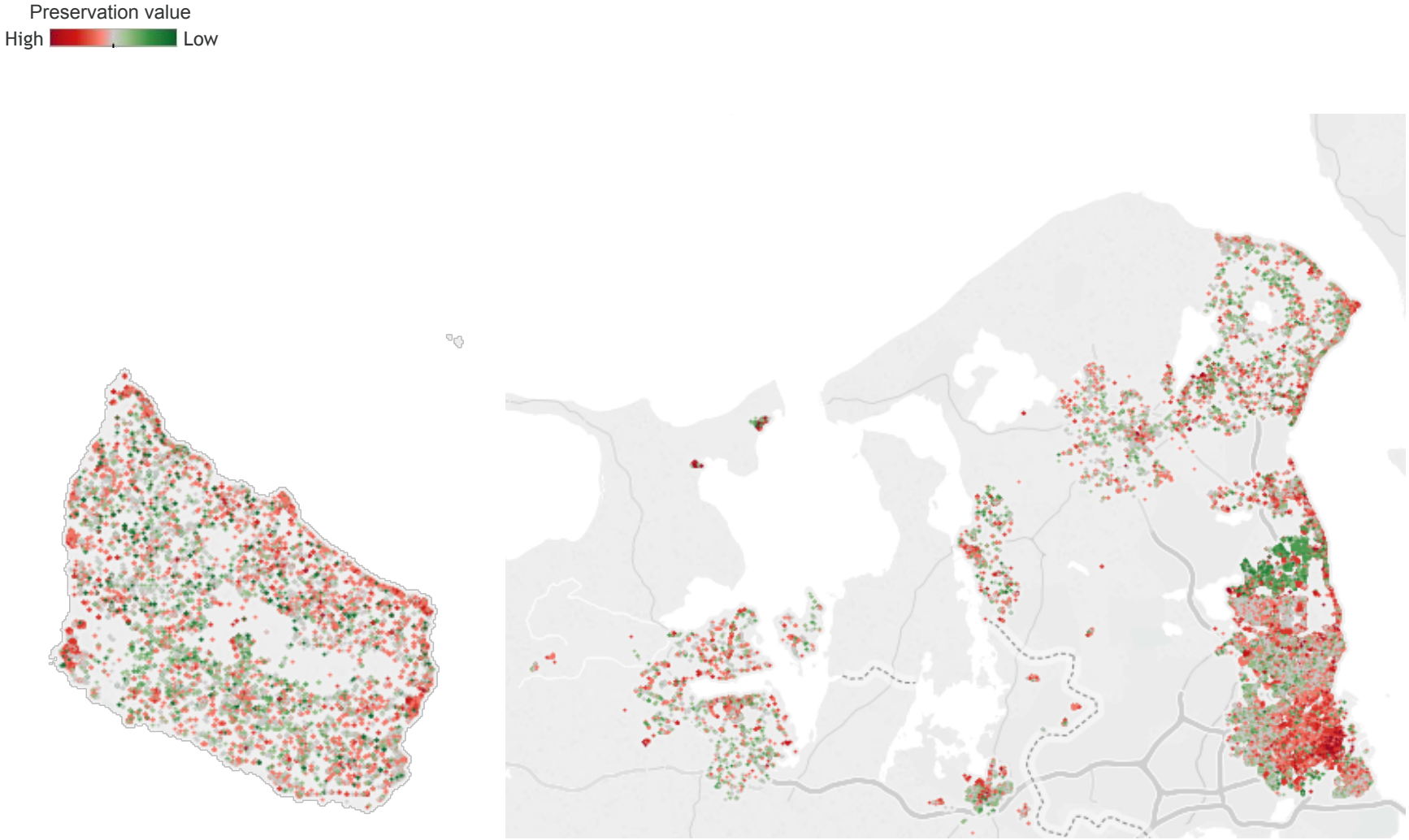
4. ANNEX: DETAILED MAPS



4. ANNEX: DETAILED MAPS



4. ANNEX: DETAILED MAPS



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