

Sounding Brighton

exploring practical approaches towards better soundscapes

Soundscape and sociotope mapping to survey Brighton residents

Östen Axelsson

Department of Psychology, Stockholm University

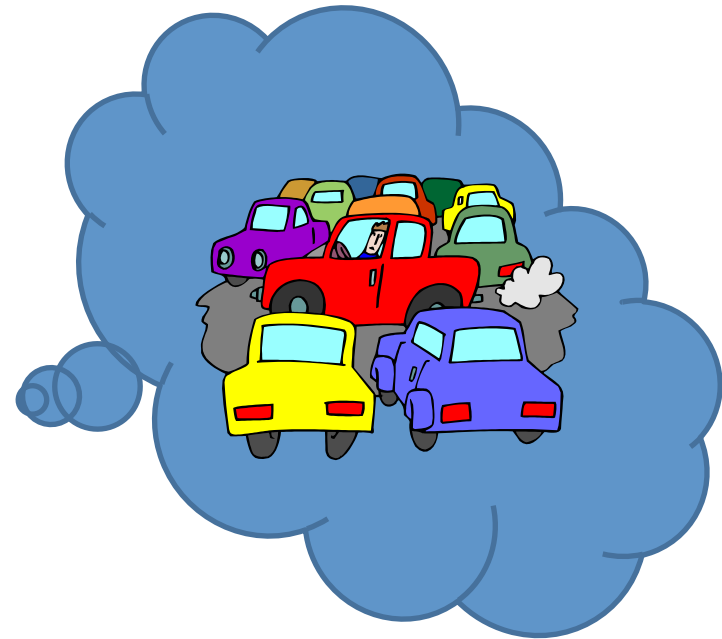
with support from

Lisa Lavia, Noise Abatement Society, and

Max Dixon, Independent Consultant

Soundscape

- Acoustic environment as perceived or experienced and/or understood, by people, in context.



Sociotope* maps

- A map showing how the citizens use, perceive and value public open space and green areas
- Developed by the Urban Planning Administration 2000 – 2002
- To involve the citizens and to avoid conflicts regarding use of public open space
- Decreases costs and speeds the process

*place for people

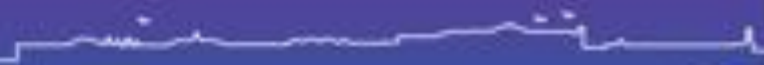
Sociotope maps



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Data quality



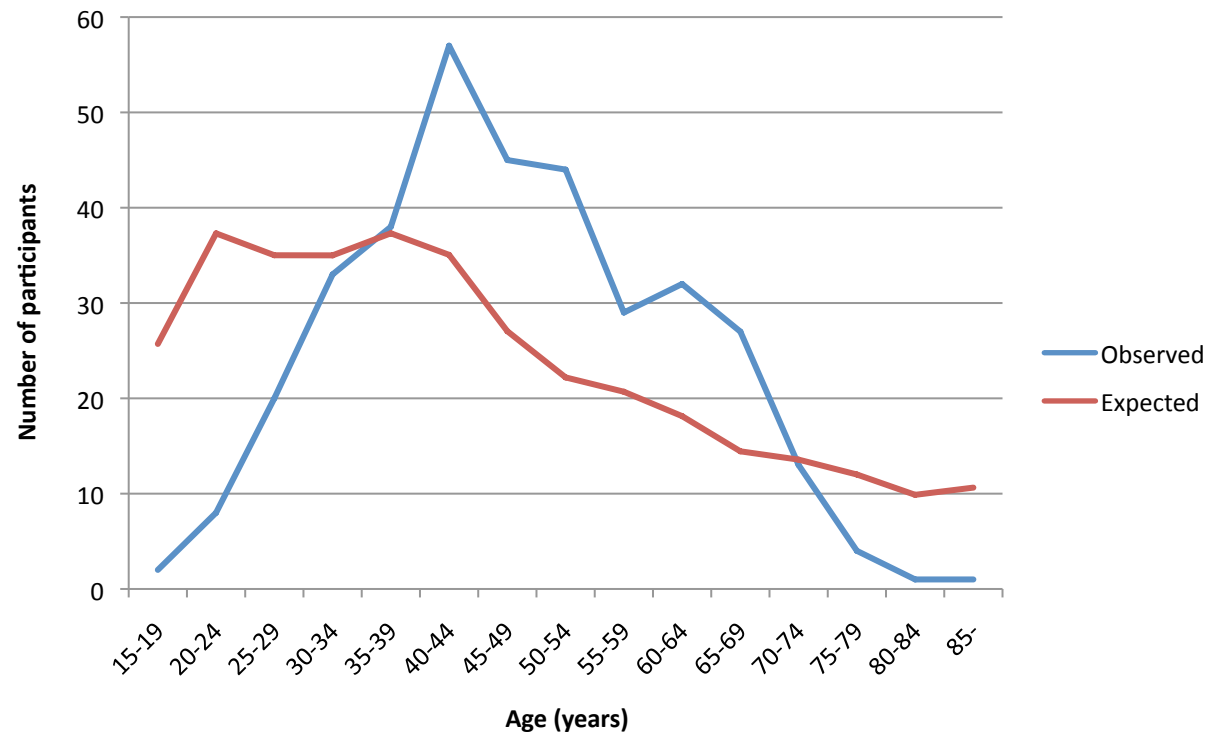
Data quality

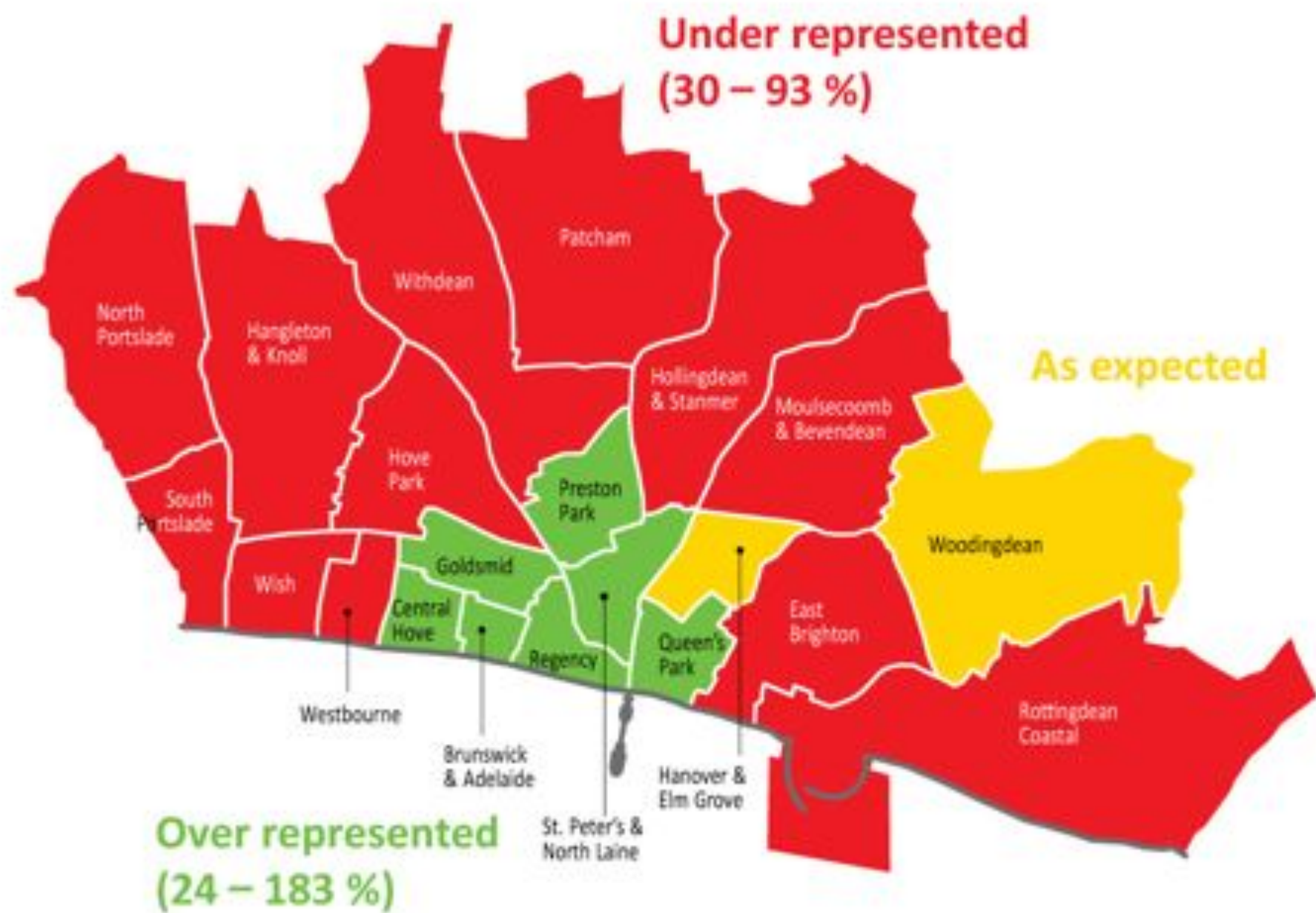
- Number of participants -

Section	Number of participants
1. Annoyance	537
2. Favourite place	395
3. Appropriate sounds	388
4. Background information	354

Data quality

- Age distribution -





Data quality

- Occupation -

Occupation	Number of participants
Employed	248 (70 %)
Retired	60 (17 %)
Other (Mostly self-employed)	29 (8 %)
Unemployed	12 (3 %)
Student	5 (1 %)

Data quality

- Summary -

- Less than optimal number of participants (100 per ward)
- Large drop-out of participants who completed the survey
- Young and old are under represented
- Middle aged (40-69 years) are over represented
- Central Brighton & Hove is over represented
- Students and unemployed are under represented

Data quality

- Conclusions -

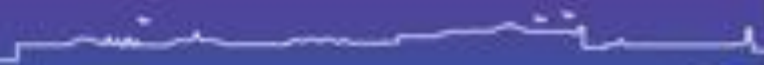
- The survey must be regarded as a pilot study
- Analyses and results must be considered as qualitative rather than quantitative
 - The survey teaches us about kinds of things, not about how important they are
- Necessary to be careful if decisions are based on the survey results

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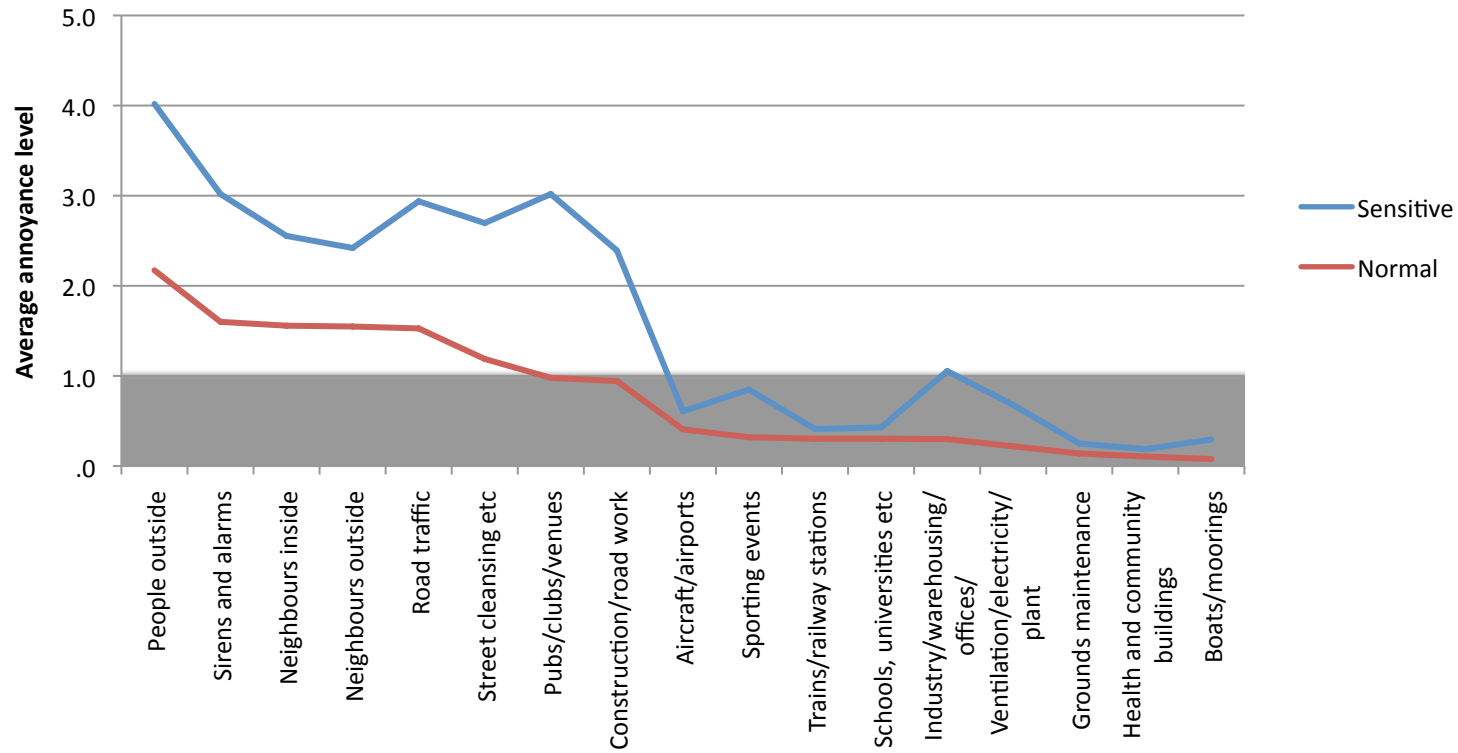
Results

- Annoyance -



Results

- Annoyance -



Results

- Annoyance -

- There are two groups of people: those who respond normally to sounds, and those who are sensitive
- Sensitive people are bothered by the same kinds of sounds as the normal group, but respond more strongly to them
- Which sounds people are bothered by is unrelated to where they live

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Results

- Sociotopes -

Results

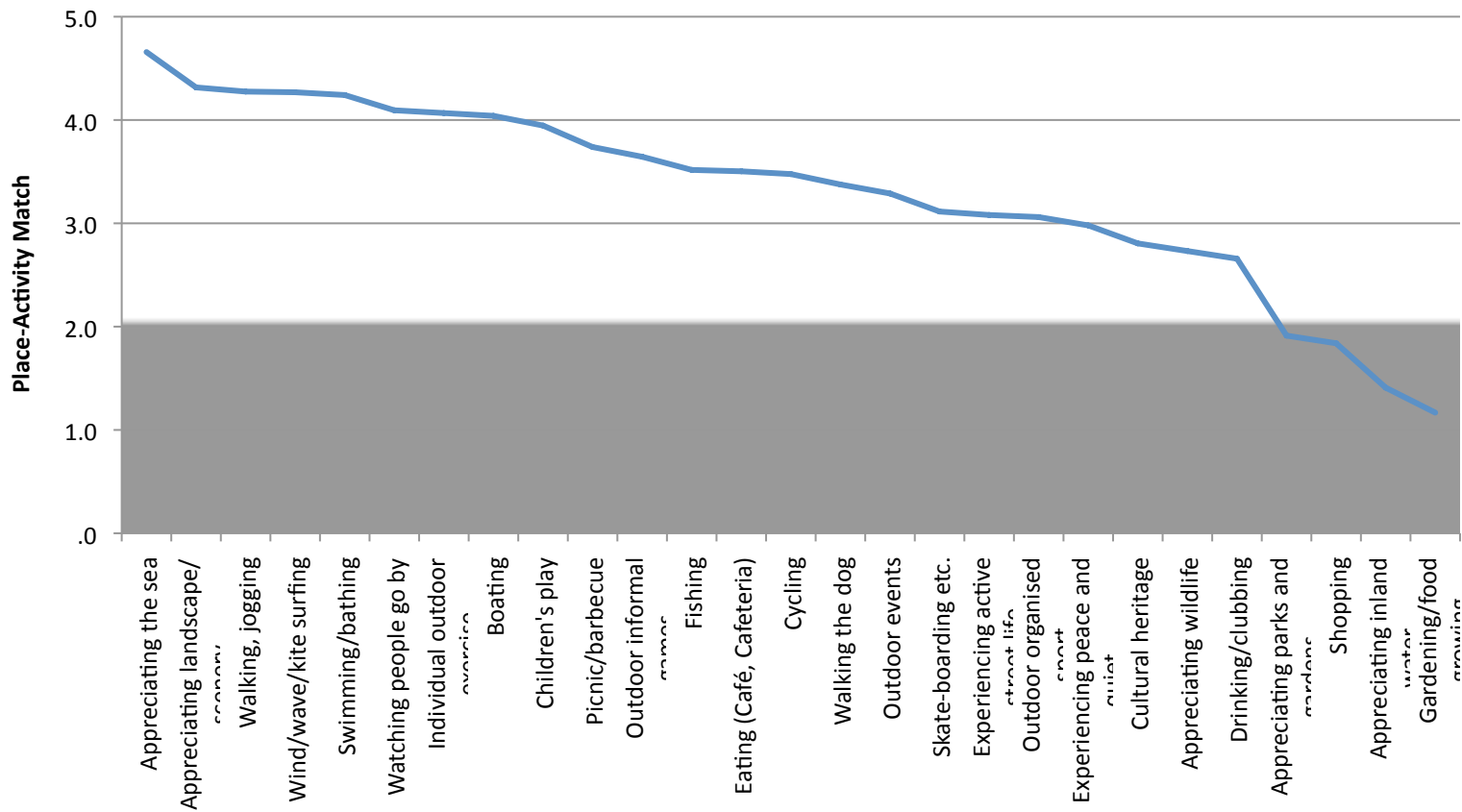
- Sociotopes -

- Favourite places in Brighton & Hove are divided into 5 categories:
 - Beach & Seaside
 - City Park
 - Peri-Urban Recreation Area
 - “My Space”
 - Downtown City

Results

- Sociotopes -

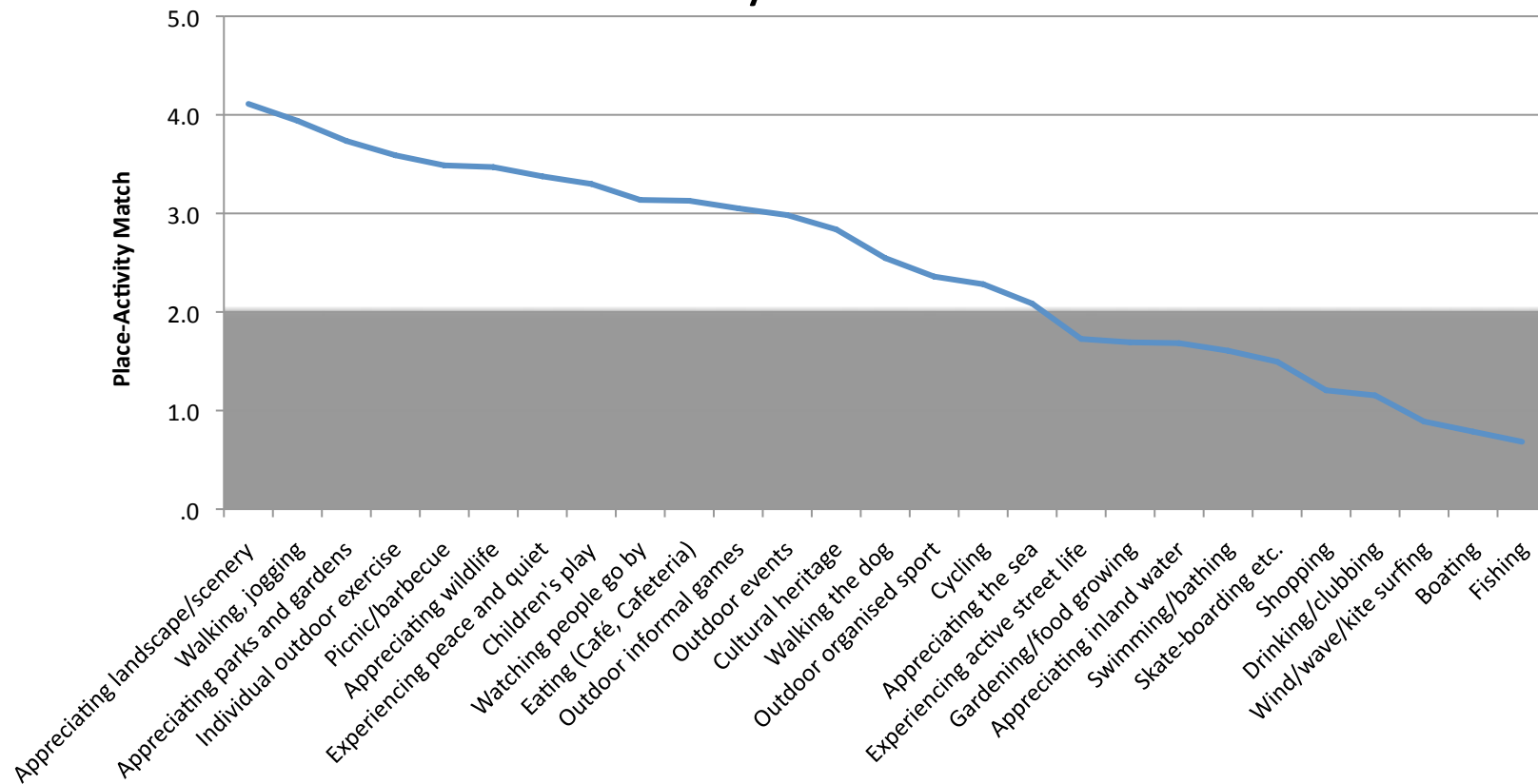
Beach & Seaside



Results

- Sociotopes -

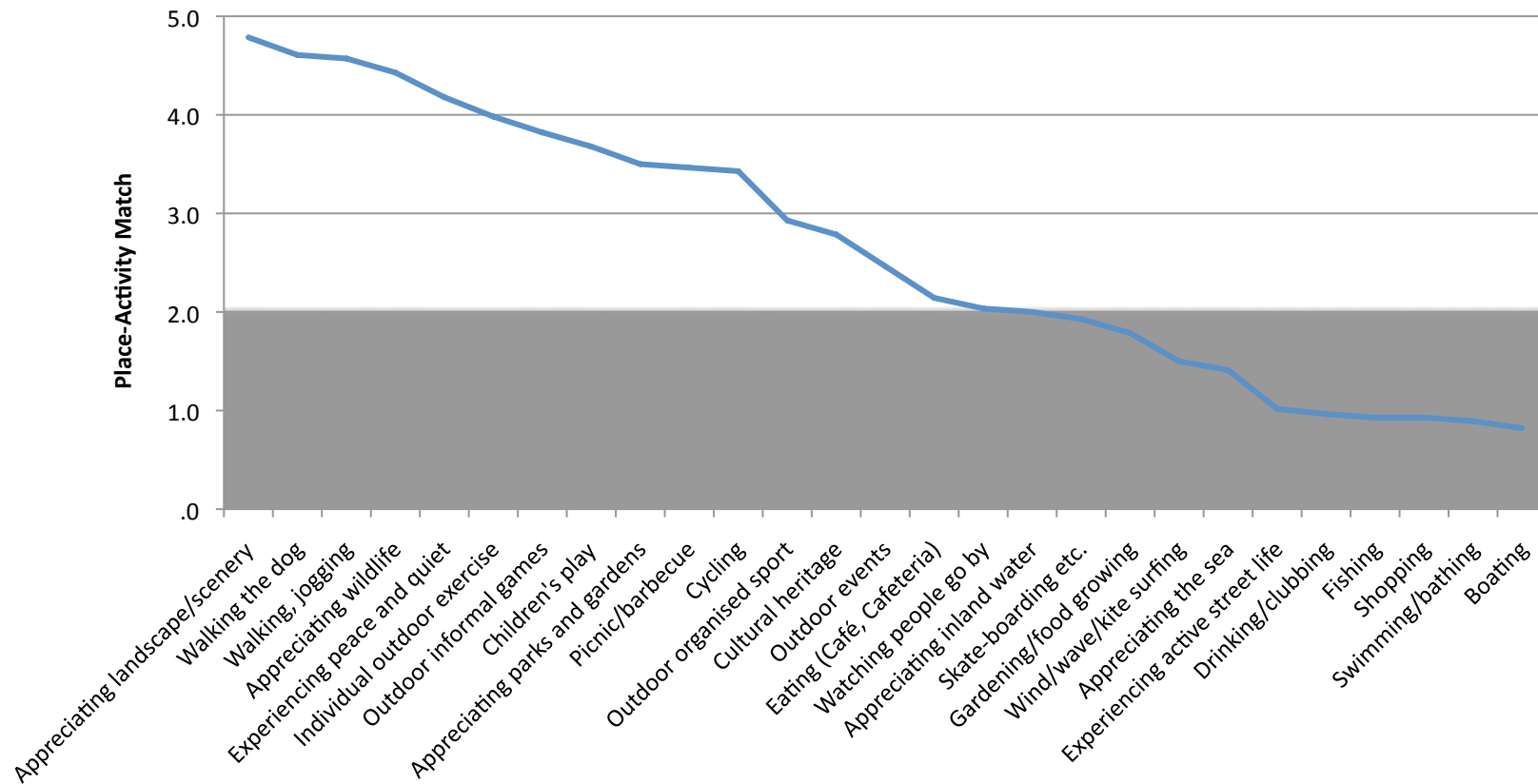
City Park



Results

- Sociotopes -

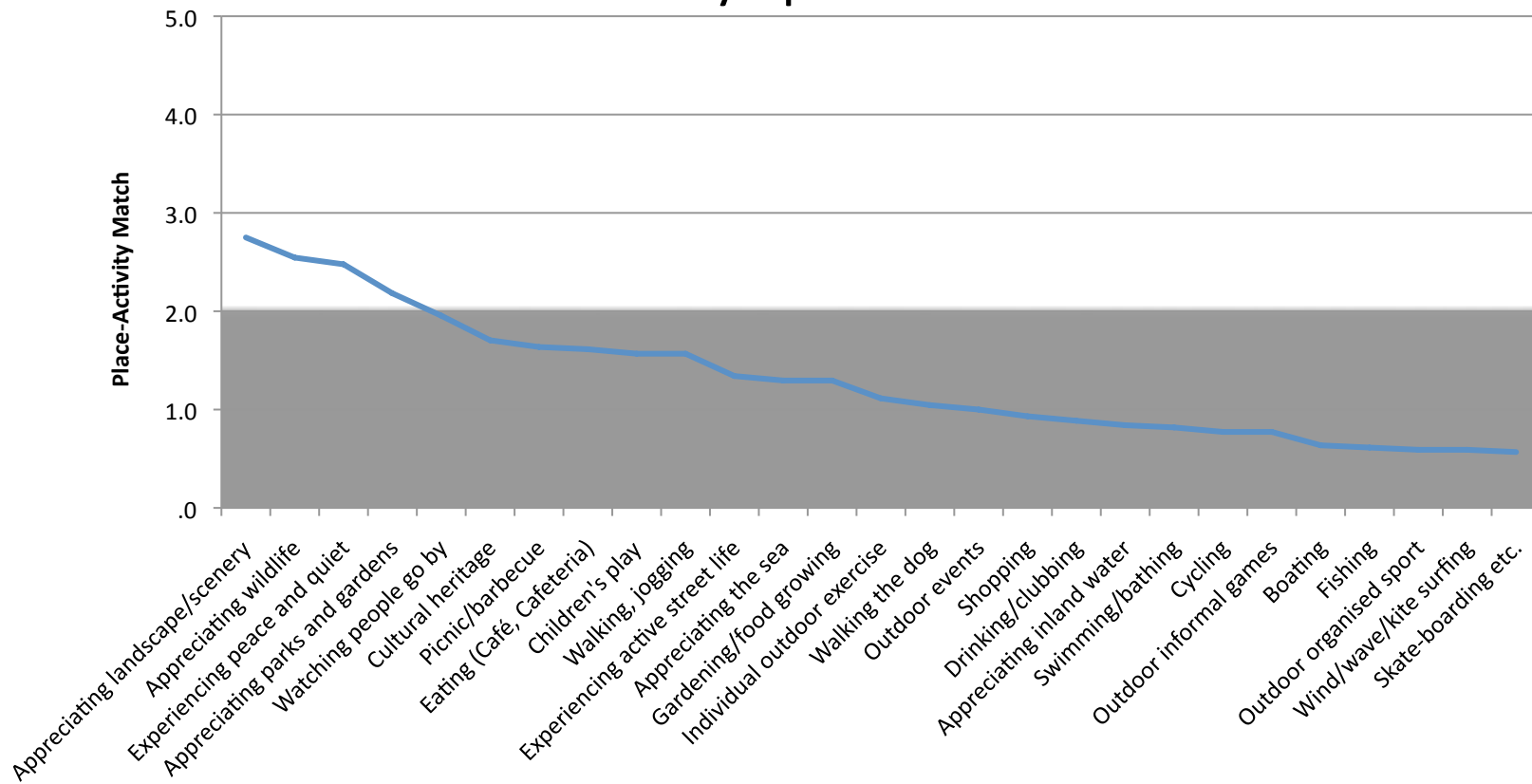
Peri-Urban Recreation Area



Results

- Sociotopes -

“My Space”



Results

- Sociotopes -

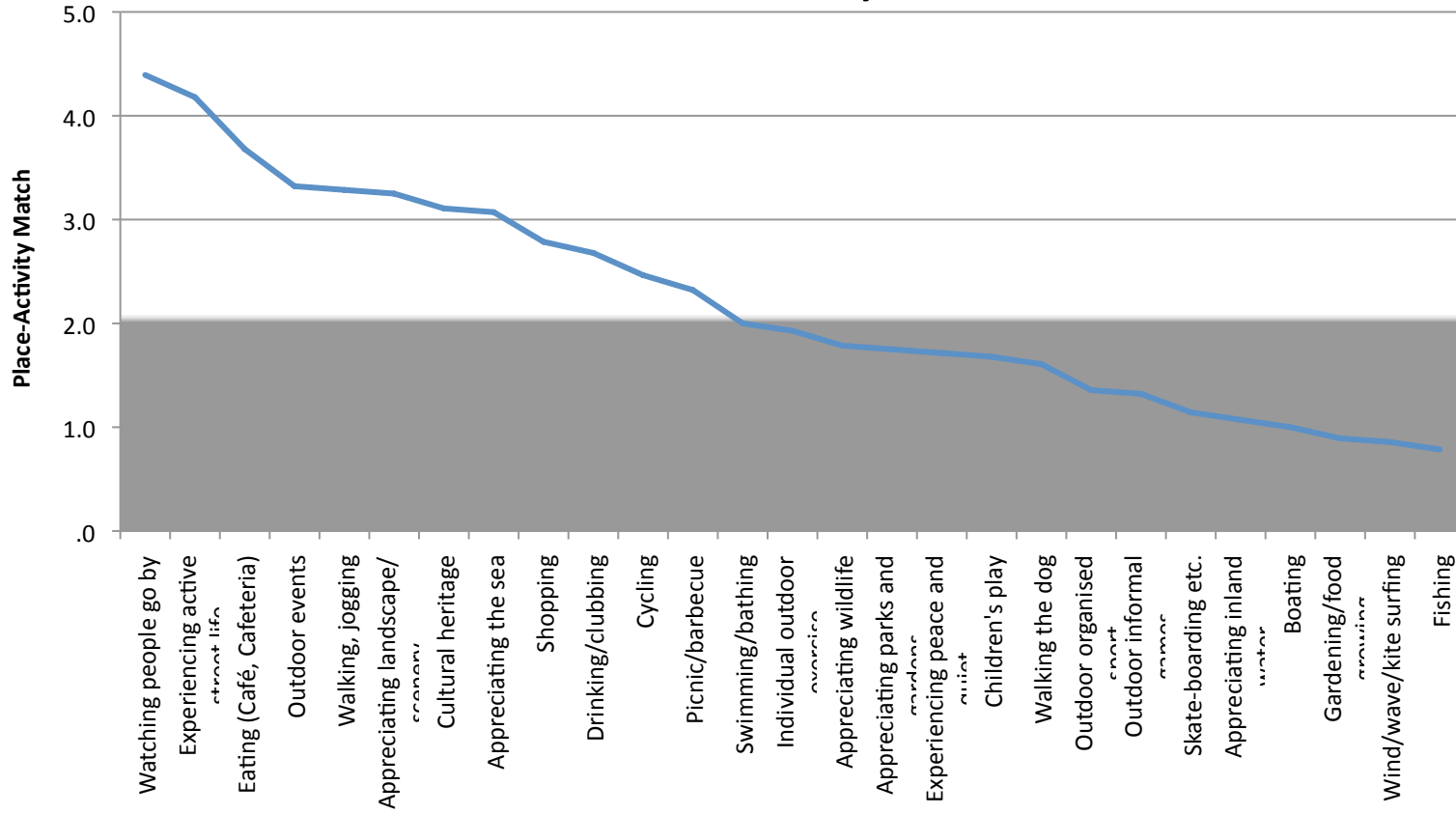
“My Space”

My Space is not strongly associated with any specific social or recreational activity. It is a place where one can relax and be oneself.

Results

- Sociotopes -

Downtown City

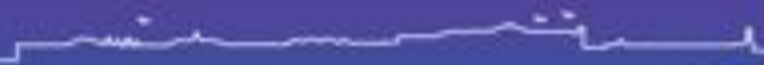


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Results

- Soundscapes -



Results

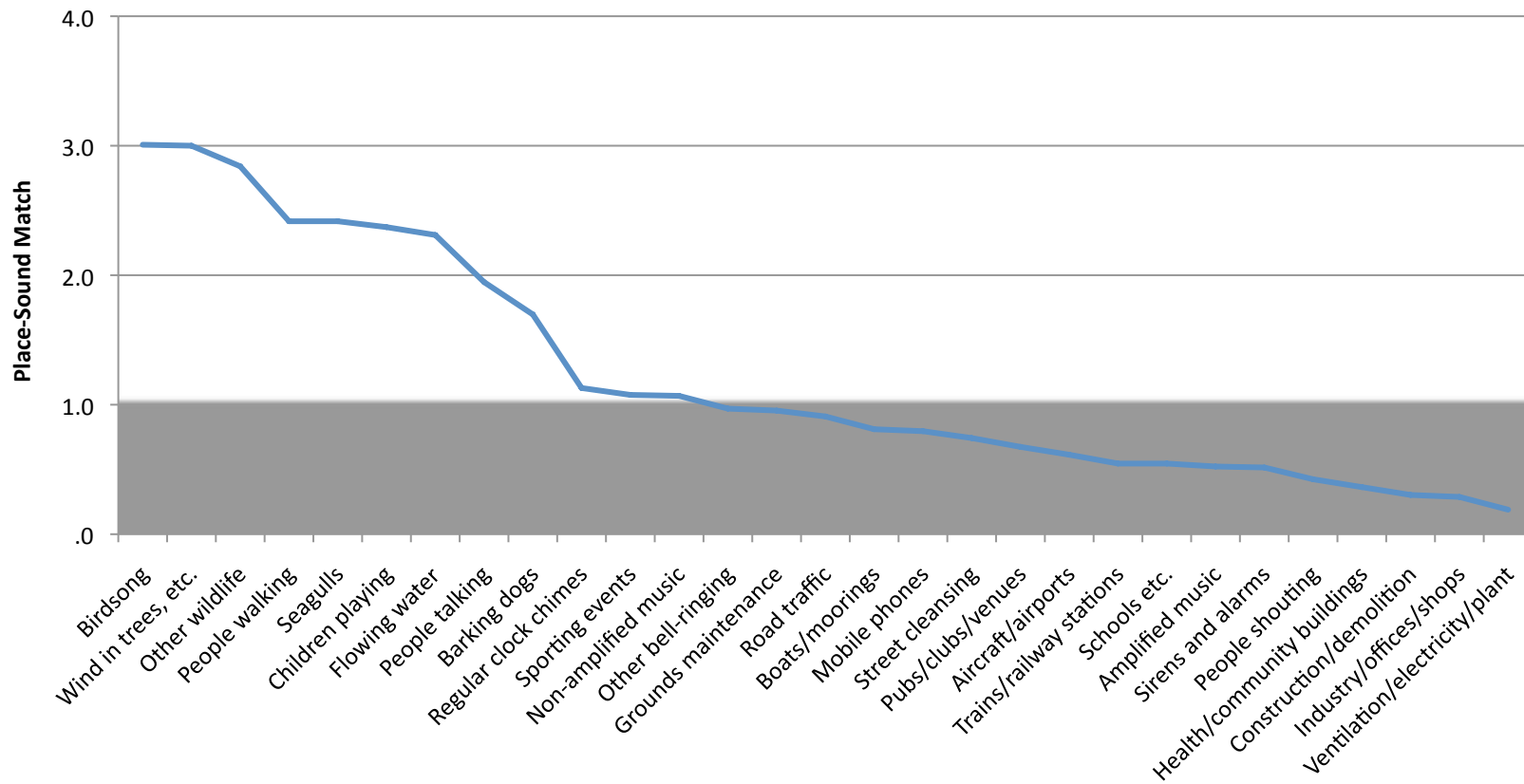
- Soundscapes -

- Also recreational soundscapes in Brighton & Hove are divided into 5 categories:
 - Urban Nature
 - Distant Nature
 - Urban
 - Seaside
 - Urban Beach

Results

- Soundscapes -

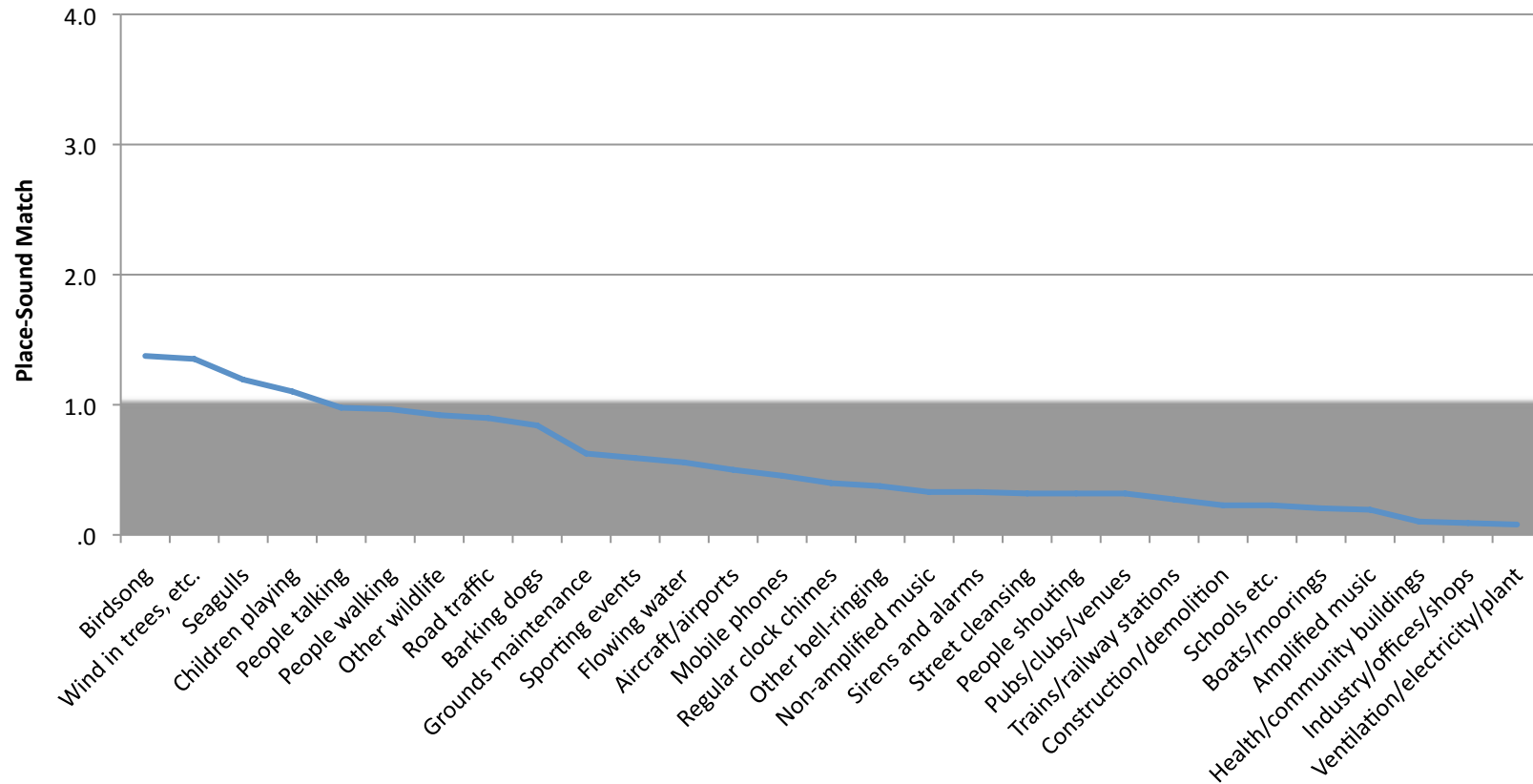
Urban Nature



Results

- Soundscapes -

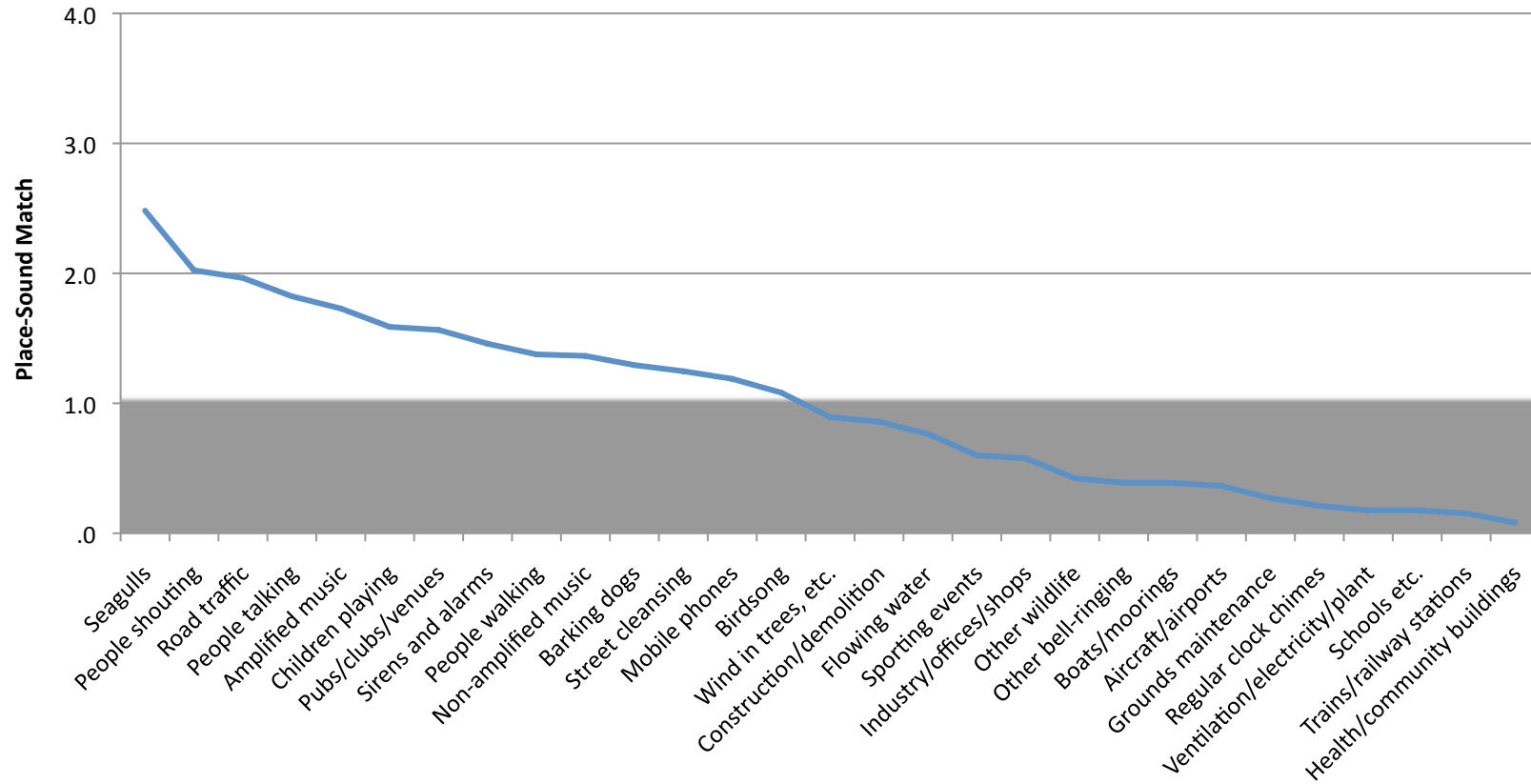
Distant Nature



Results

- Soundscapes -

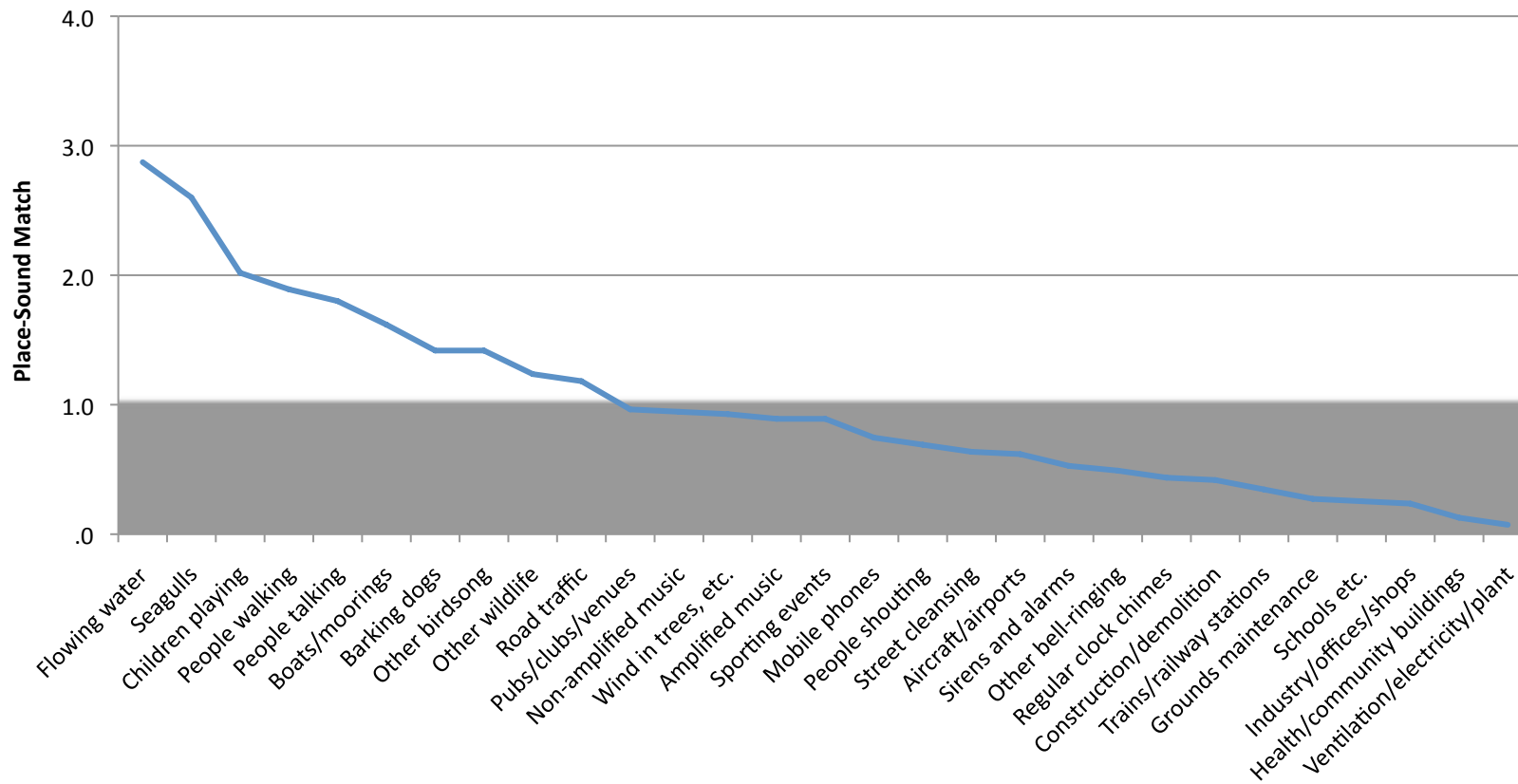
Urban



Results

- Soundscapes -

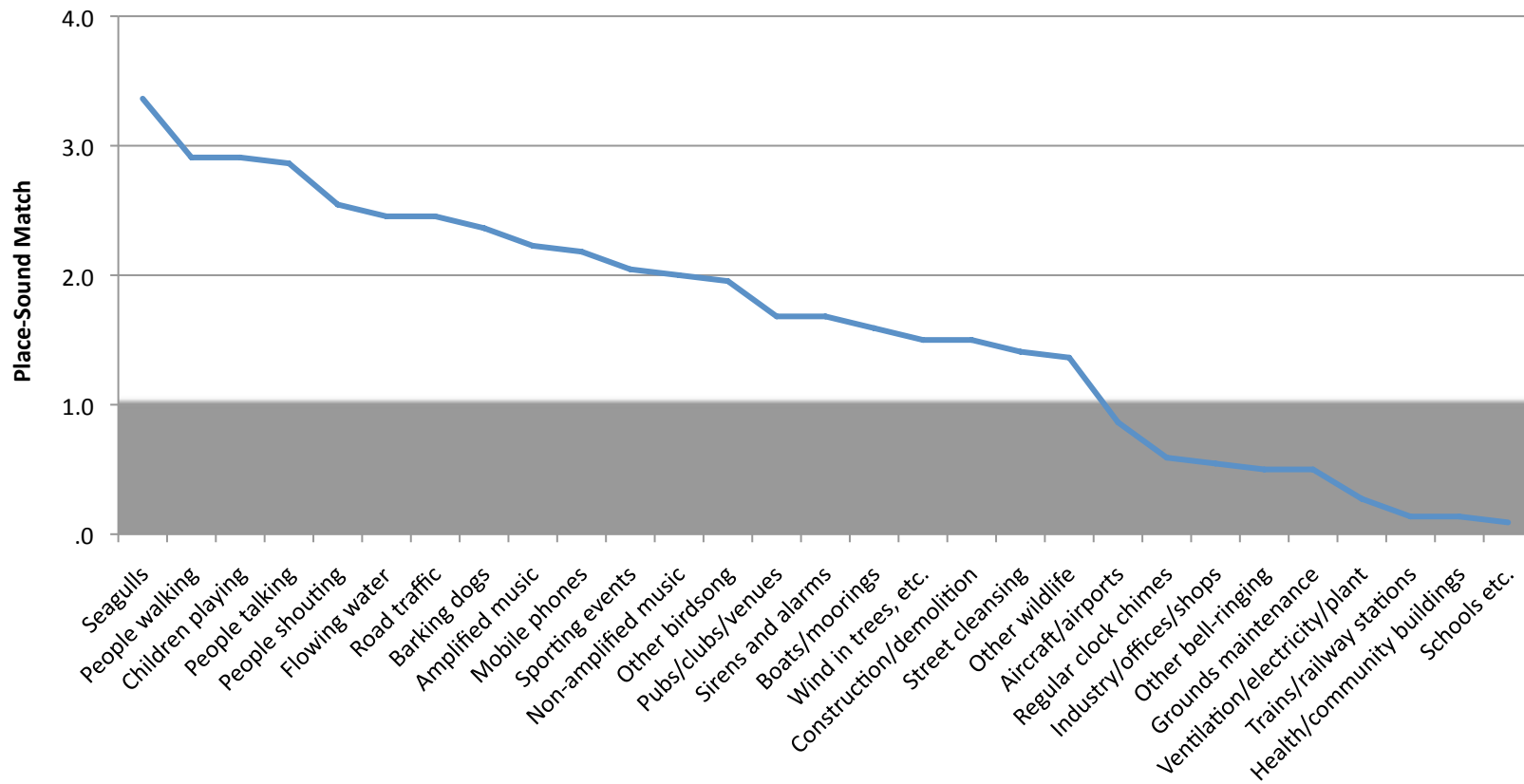
Seaside



Results

- Soundscapes -

Urban Beach

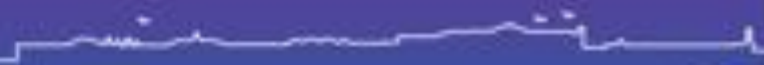


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Results

- Sociotope-Soundscape concordance -



Observed Frequencies

	Soundscape					
Sociotope	Urban Nature	Distant Nature	Urban	Seaside	Urban Beach	Totals
Beach & Seaside	41	15	31	44	12	143
City Park	46	34	27	4	5	116
Peri-Urban Recreation Area	34	20	1	0	0	55
My Space	7	17	12	2	1	39
Downtown City	4	1	14	5	4	28
Totals	132	87	85	55	22	381

Expected Frequencies

	Soundscape					
Sociotope	Urban Nature	Distant Nature	Urban	Seaside	Urban Beach	Totals
Beach & Seaside	49.5	32.7	31.9	20.6	8.3	143
City Park	40.2	26.5	25.9	16.7	6.7	116
Peri-Urban Recreation Area	19.1	12.6	12.3	7.9	3.2	55
My Space	13.5	8.9	8.7	5.6	2.3	39
Downtown City	9.7	6.4	6.2	4	1.6	28
Totals	132	87	85	55	22	381

Deviation (%)

	Soundscape				
Sociotope	Urban Nature	Distant Nature	Urban	Seaside	Urban Beach
Beach & Seaside	-17.2%	-54.1%	-2.8%	113.6%	44.6%
City Park	14.4%	28.3%	4.2%	-76.0%	-25.4%
Peri-Urban Recreation Area	78.0%	58.7%	-91.9%	-100.0%	-100.0%
My Space	-48.1%	91.0%	37.9%	-64.3%	-56.5%
Downtown City	-58.8%	-84.4%	125.8%	25.0%	150.0%

Deviation (%)

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Results

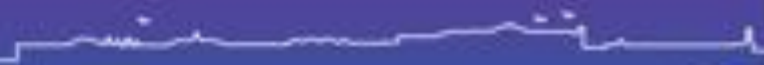
- Sociotope-Soundscape concordance -
- There is a strong and statistically significant relationship between sociotopes and soundscapes
- A park should have a park soundscape, and the city centre should have a city soundscape

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Results

- Where to go -



Results

- Where to go -

The most popular areas are:

- The Beach & Seaside
- Stanmer Park
- The Downs
- St Anne's Well Gardens
- Pavilion Gardens
- North Laines
- Preston Park
- Hove Lawns
- The Devil's Dyke
- Queen's Park
- Hove Park
- Castle Hill
- New Steine
- The Level

The Beach & Seaside

Everything but a peri-urban recreation area
The Brighton & Hove seaside gain its attraction from its vast diversity of experiences



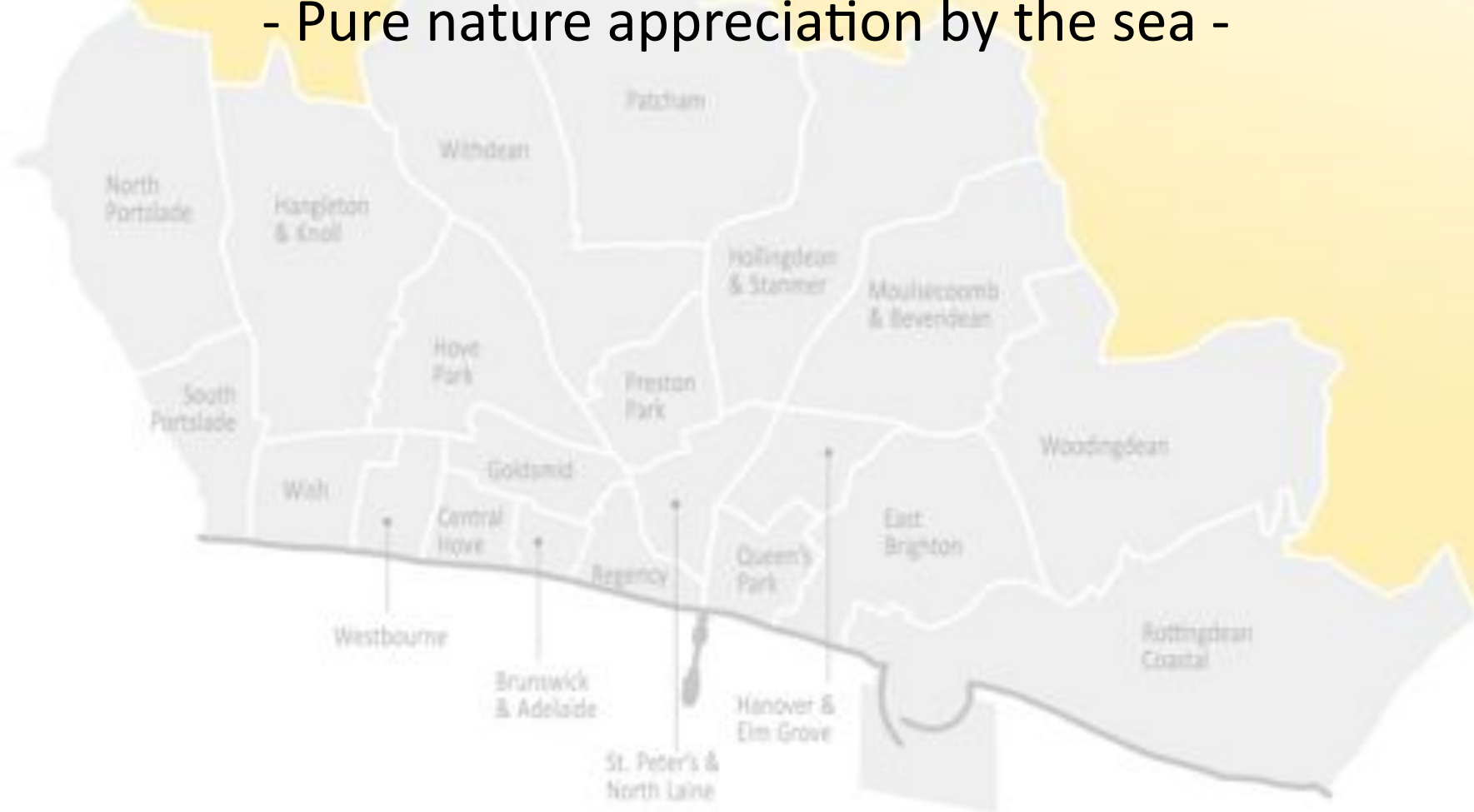
Stanmer Park

A “city park” with a peri-urban recreation area character
- Pure nature appreciation -



The Downs

A seaside, peri-urban recreation area
- Pure nature appreciation by the sea -



St Anne's Well Gardens

A city park providing urban nature
- A green oasis in the urban jungle -



Pavilion Gardens

A city park providing proximity to the city and to urban nature



North Laines

A down town, seaside area



Preston Park

A city park providing urban nature
- A green oasis in the urban jungle -



Hove Lawns

A seaside green area with an urban feeling





The Devil's Dyke

A "city park" with a peri-urban recreation area character
- Pure nature appreciation -

Queen's Park

A city park providing urban nature
- A green oasis in the urban jungle -



Results

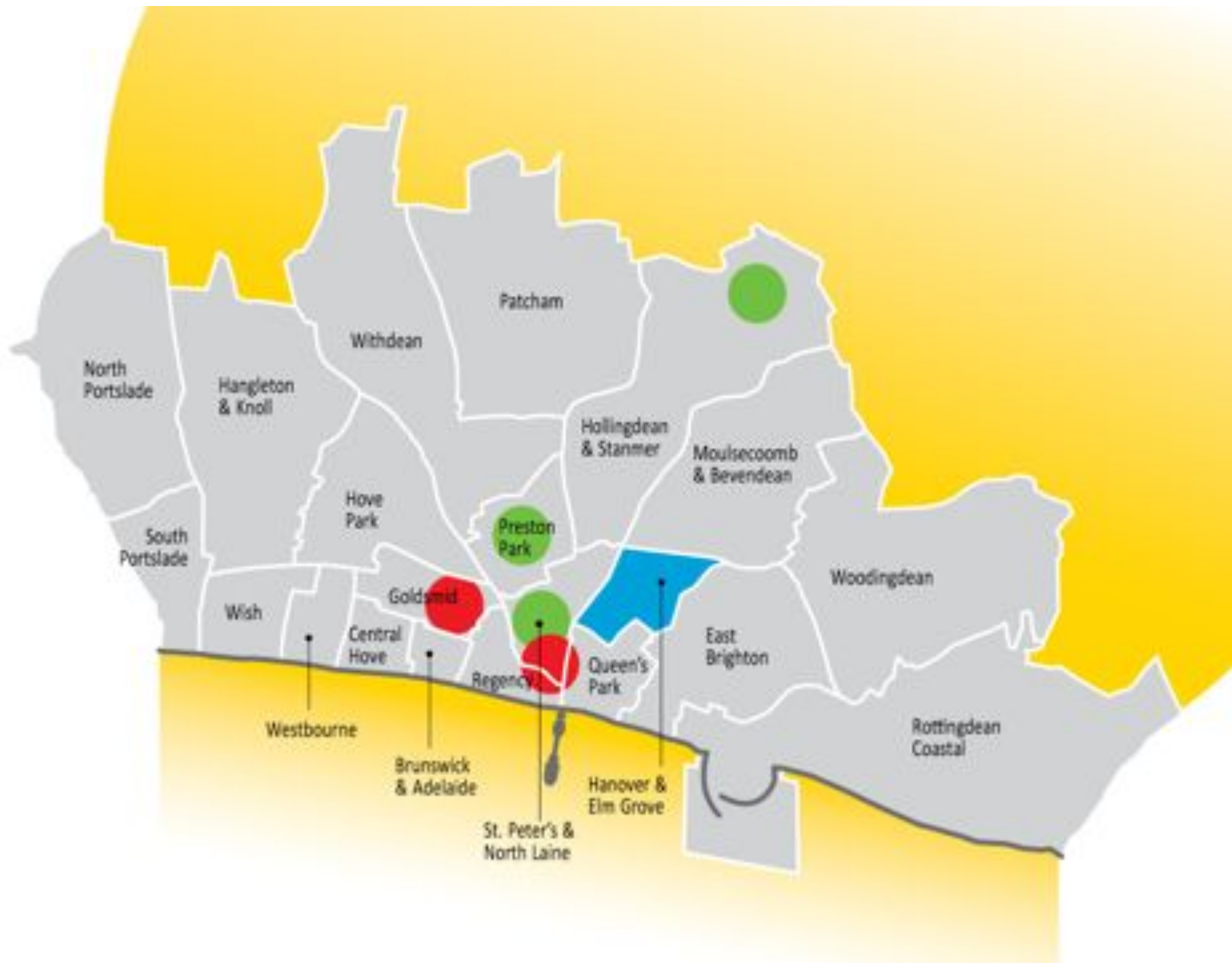
- Where to go -

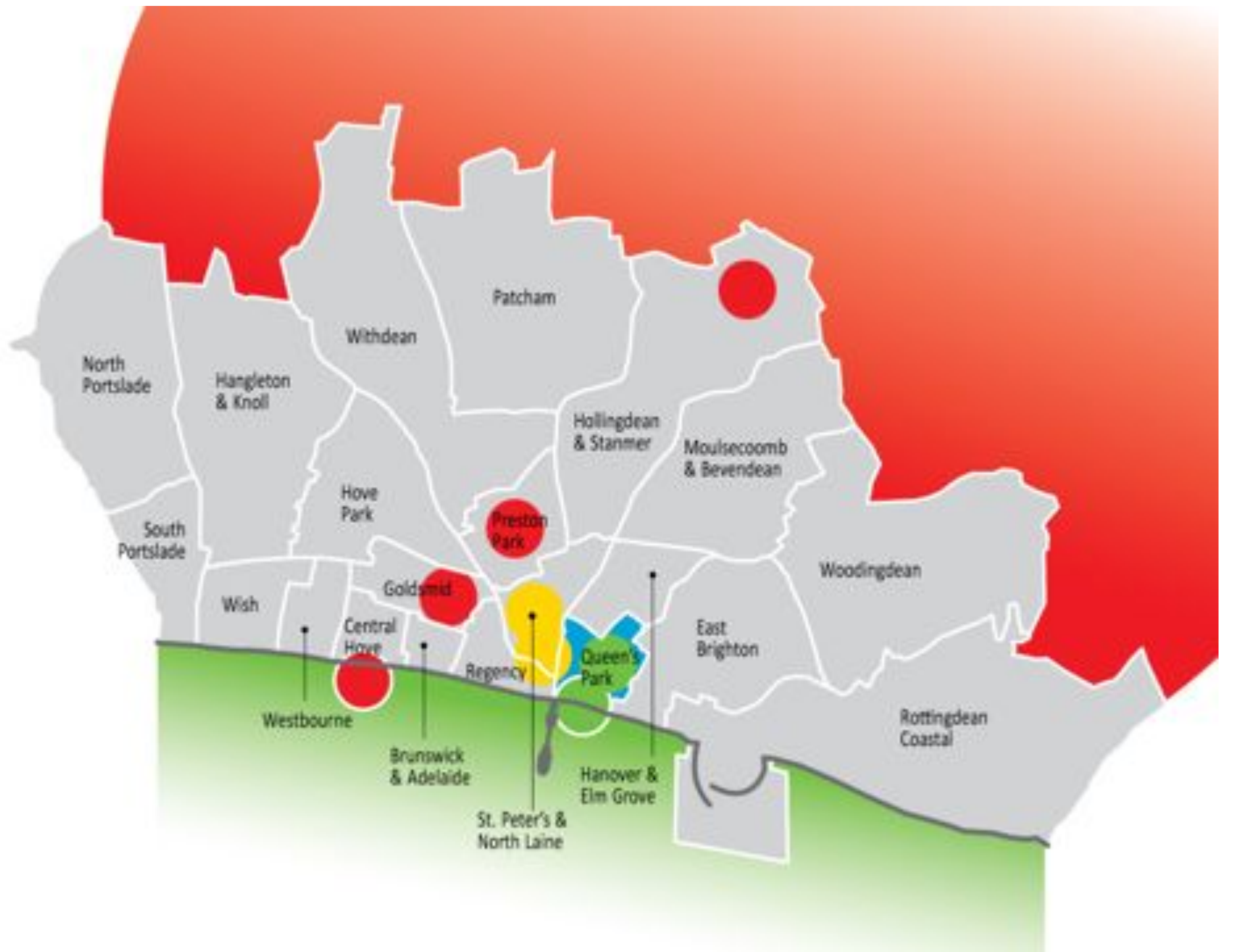
- Areas providing a larger diversity of experiences are the most attractive in terms of social and recreational values
- An area must be large enough to be able to provide diverse experiences without interference between activities and without being “fragmented”

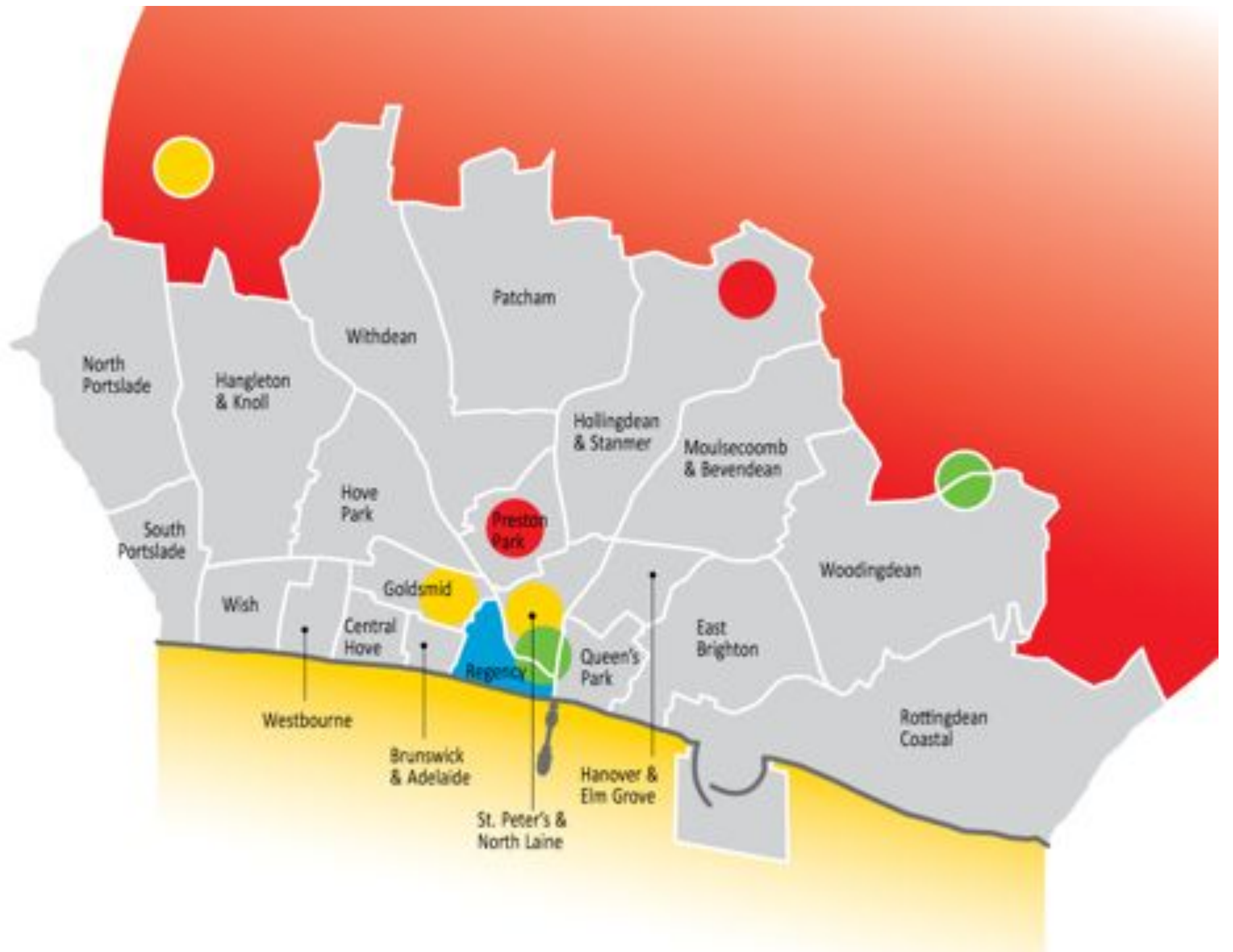
Results

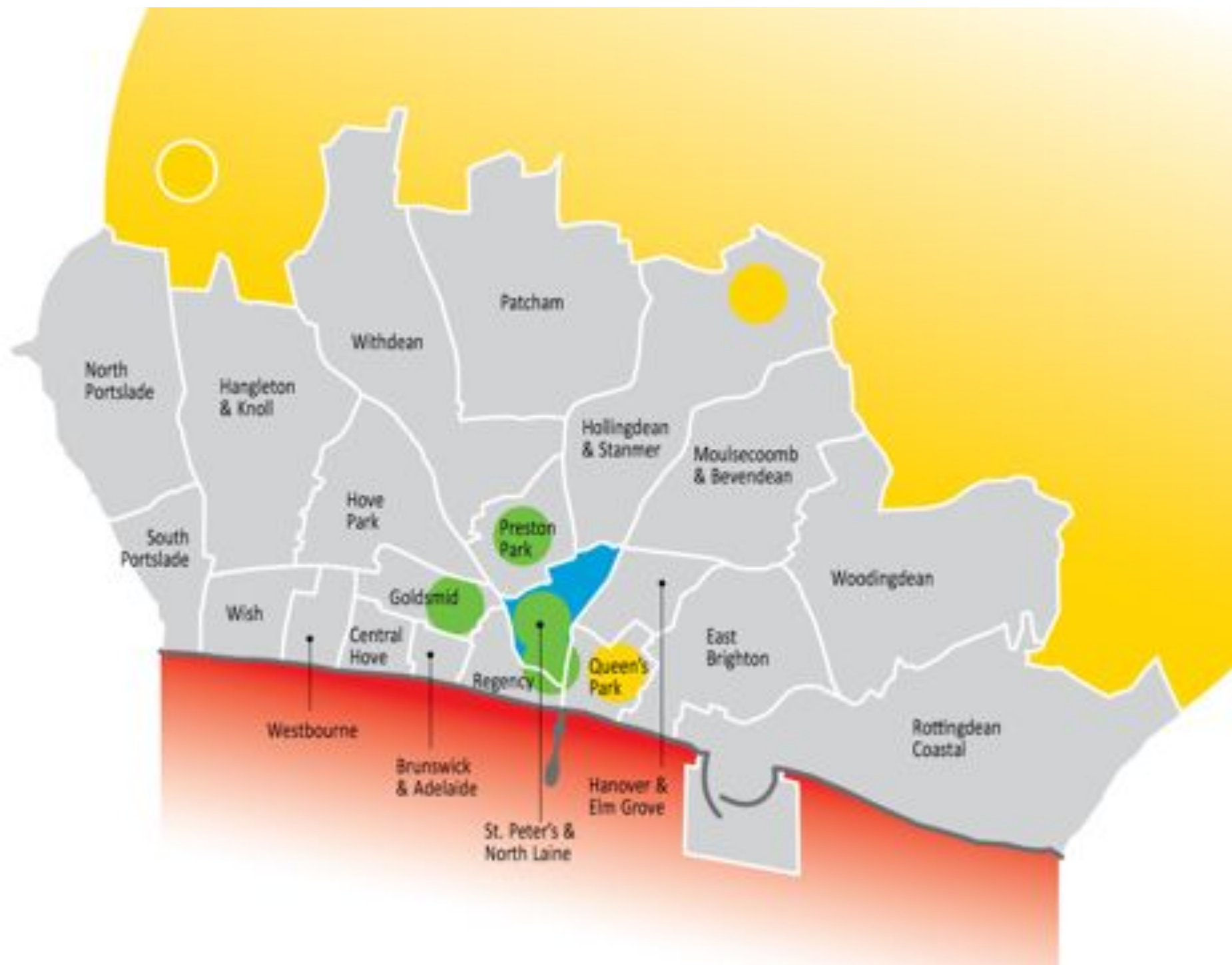
- Where to go -

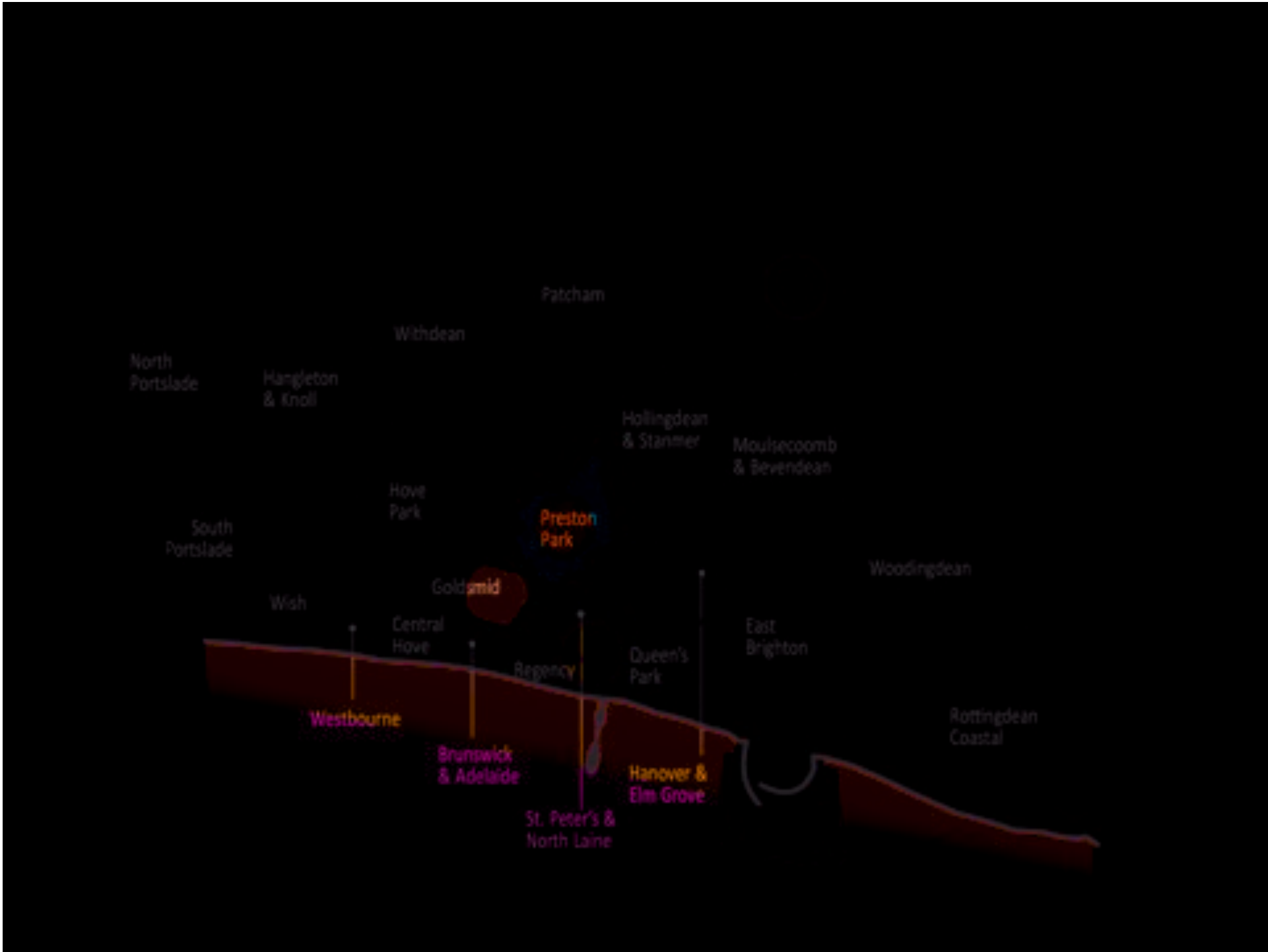
- Where people prefer to go depends on where they live
- The following slides present where people in Brighton & Hove prefer to go, divided by ward
 - Green marks ● represent places selected more often than expected by chance
 - Red marks ● represent places selected less often than expected by chance
 - Yellow marks ● represent places selected as often as expected by chance

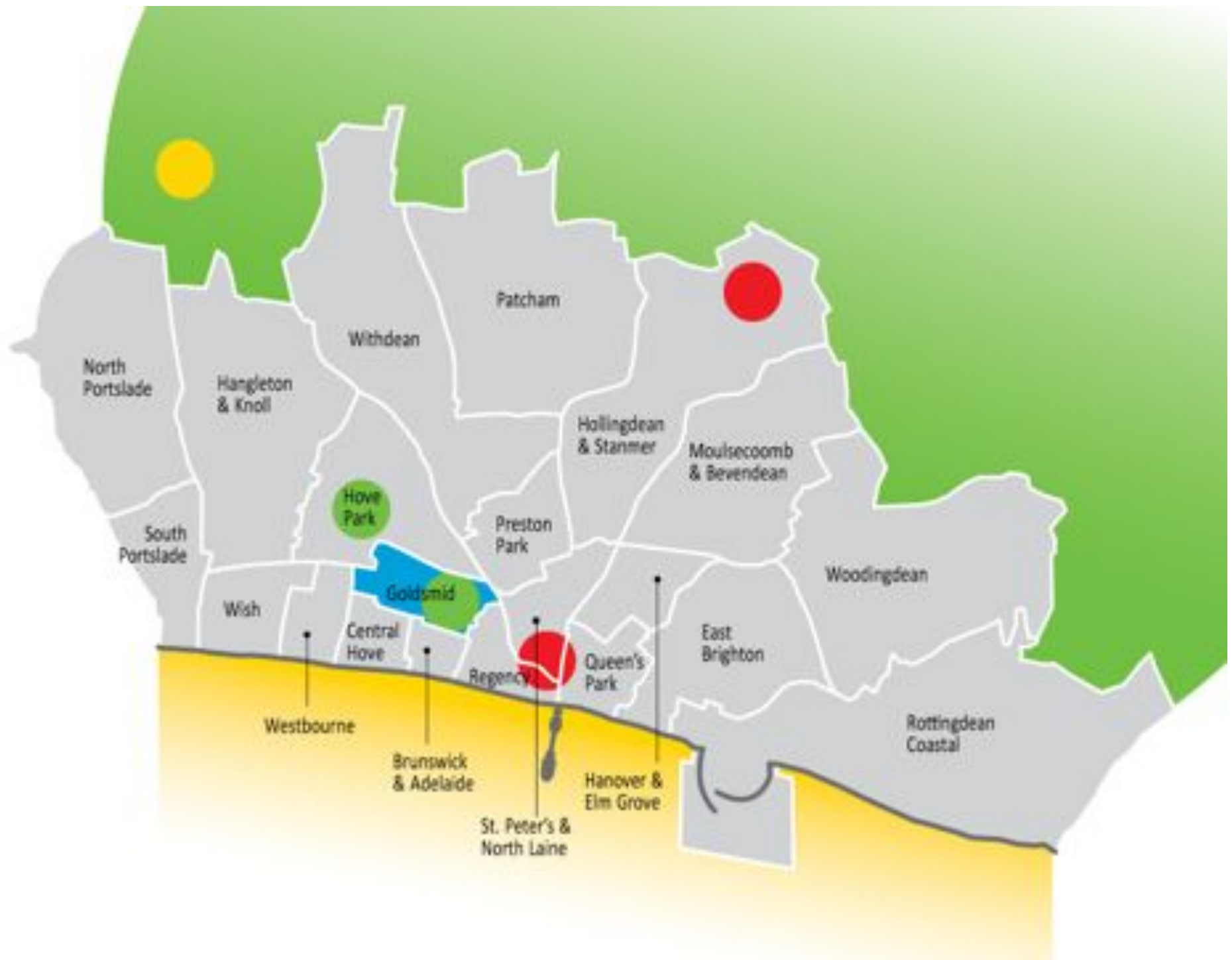


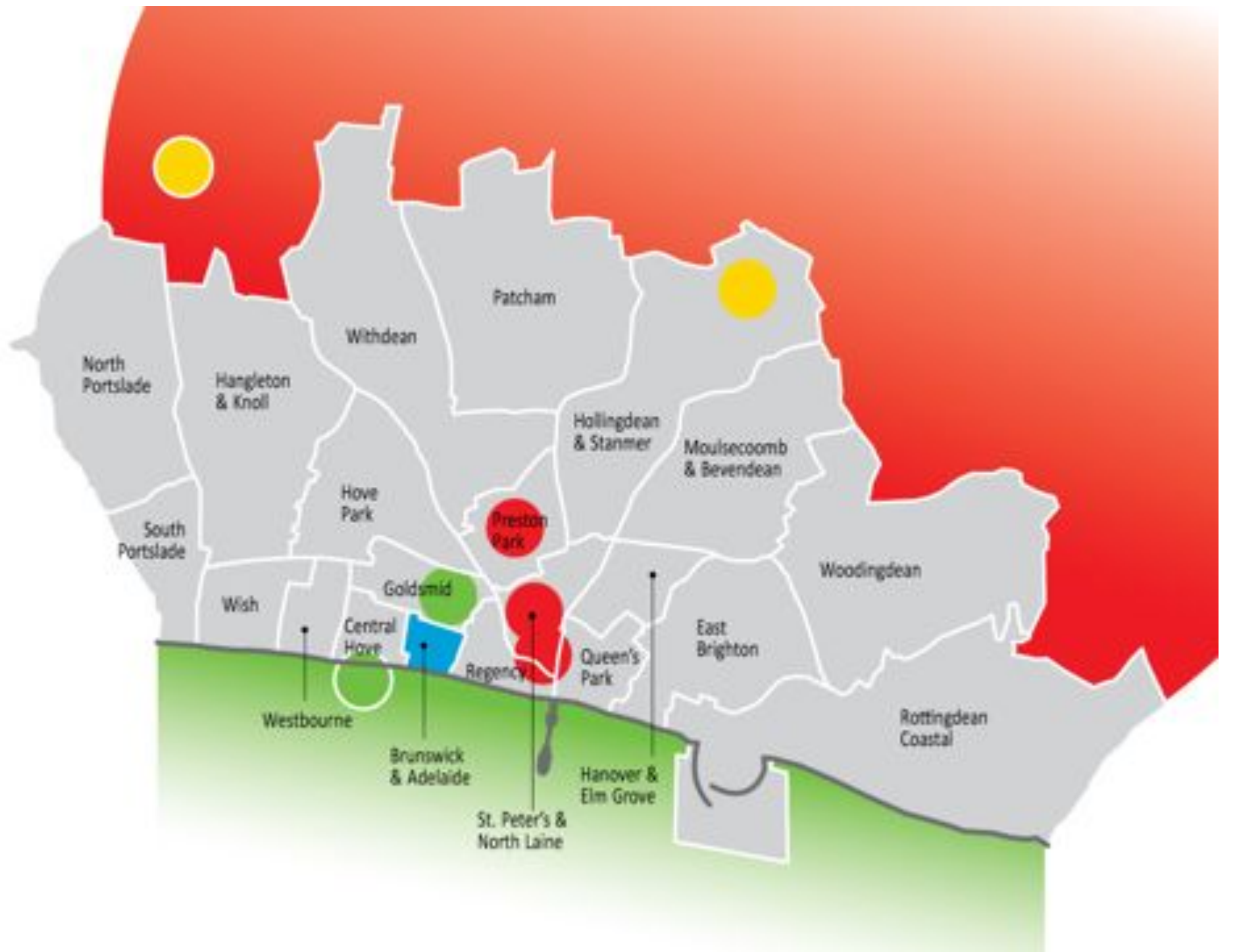


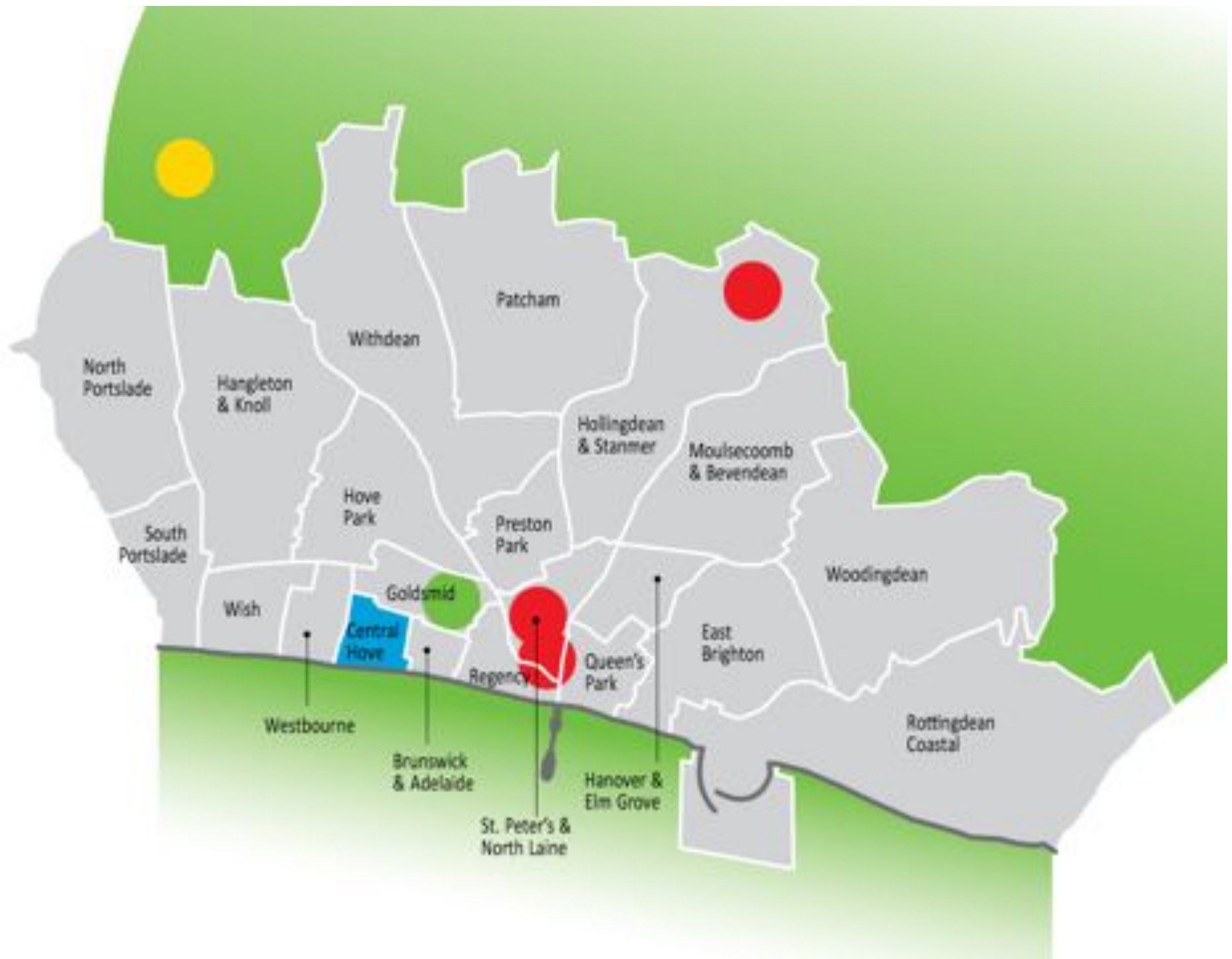


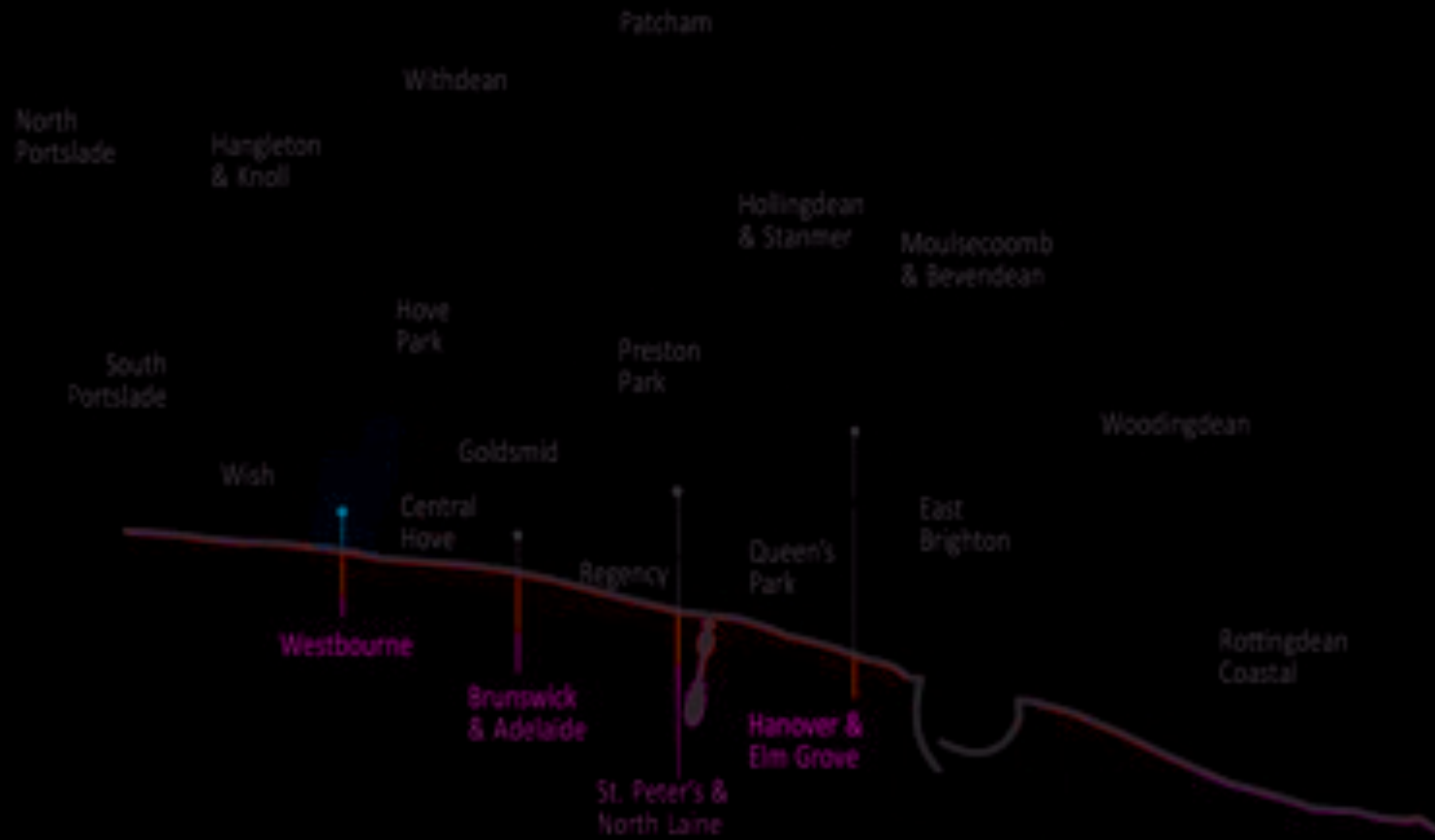
















North
Portslade

Hangleton
& Knoll

Withdean

Patcham

Hollingdean
& Stanmer

Moulsecoomb
& Bevendean

South
Portslade

Hove
Park

Preston
Park

Woodingdean

Wish

Goldsmid

Central
Hove

Regency

Queen's
Park

East
Brighton

Westbourne

Brunswick
& Adelaide

St. Peter's &
North Laine

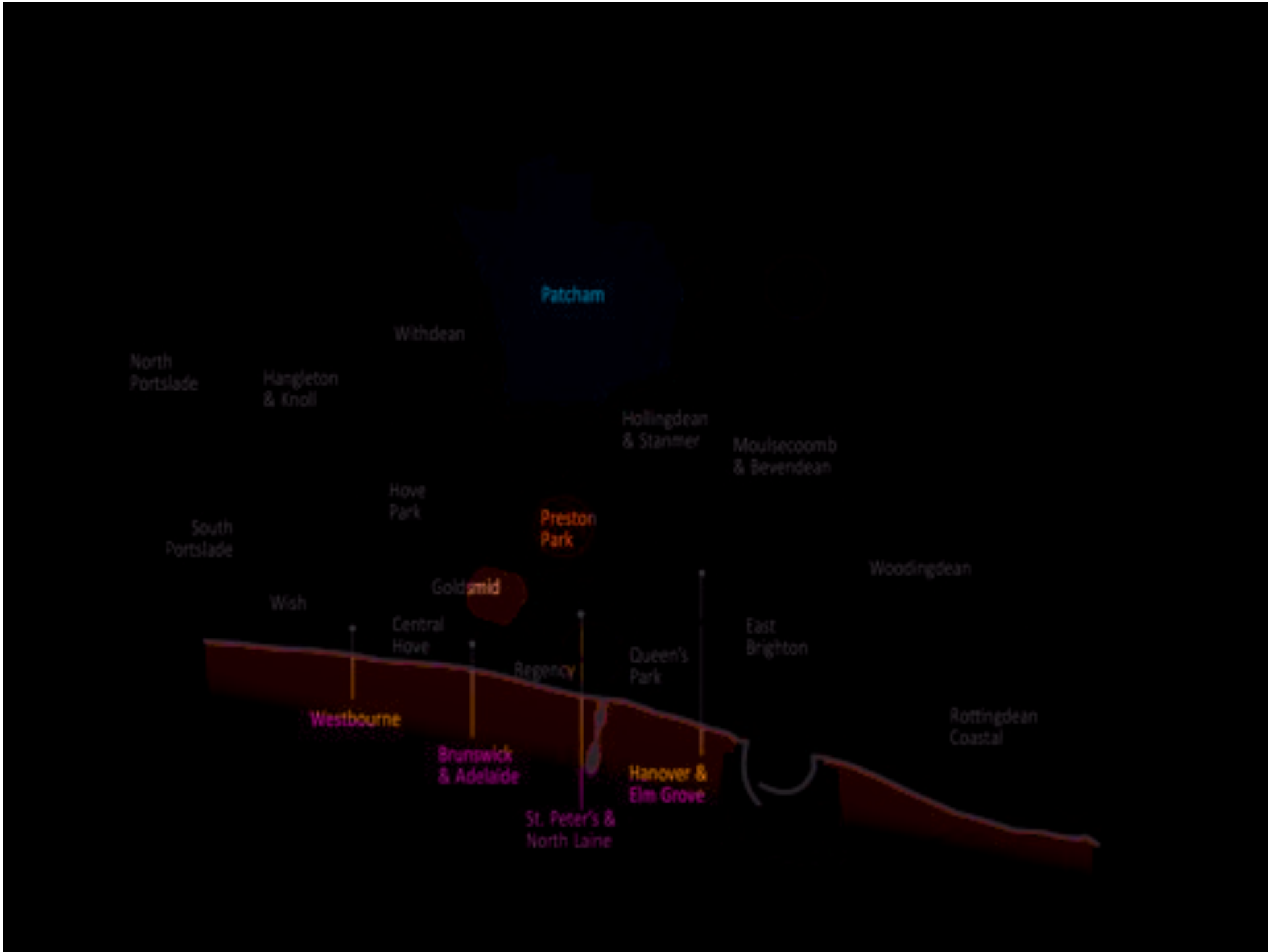
Hanover &
Elm Grove

Rottingdean
Coastal

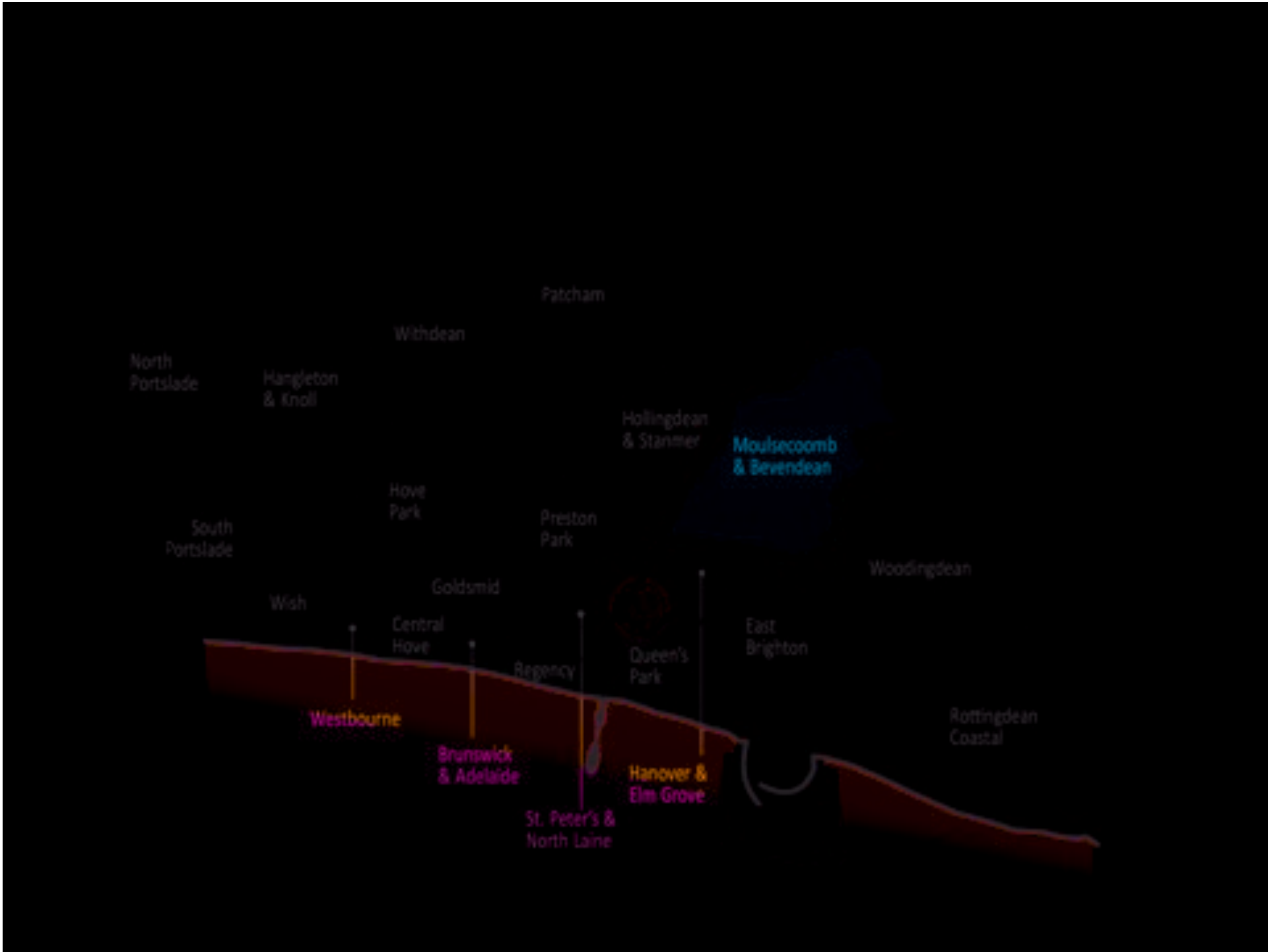


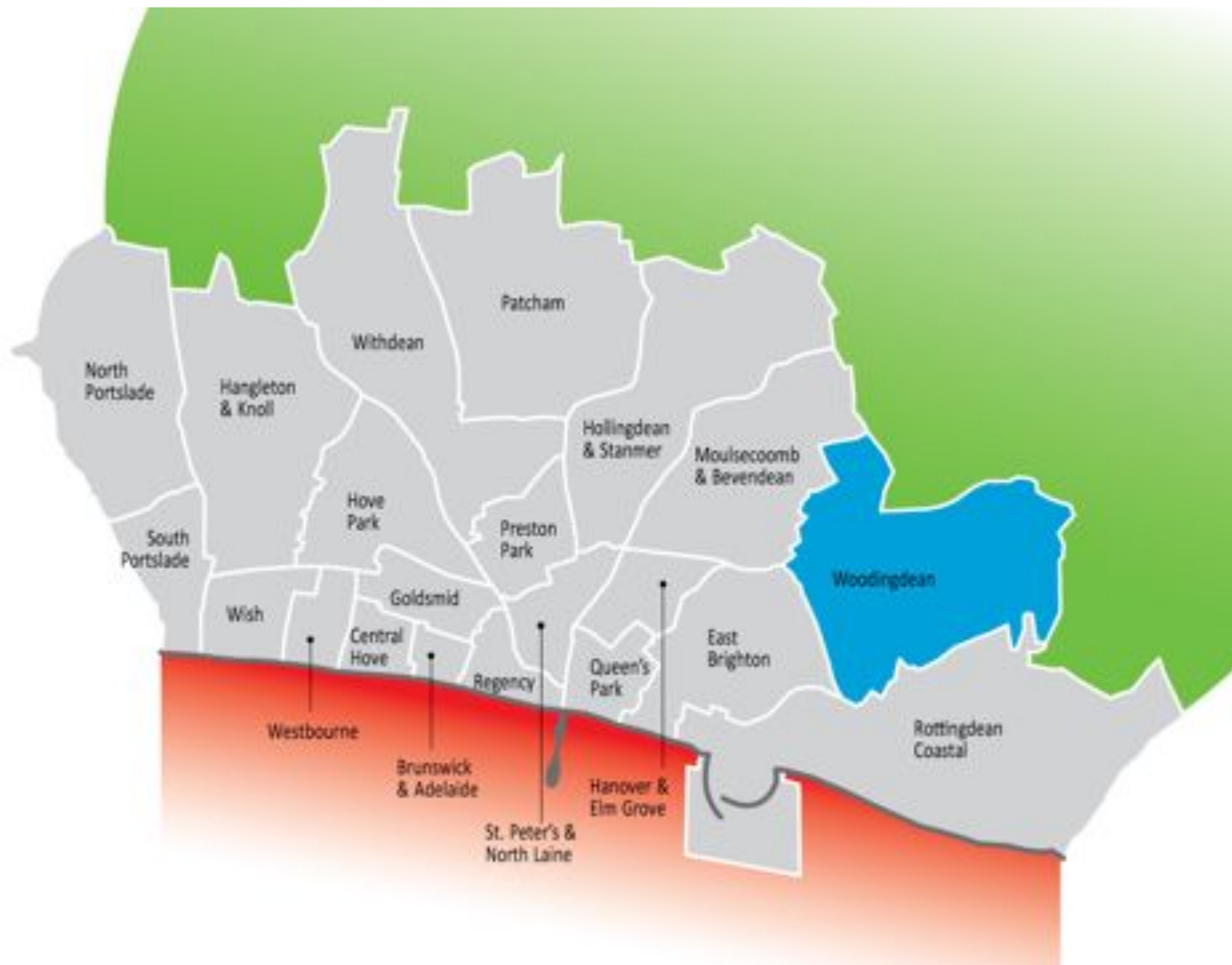














A map of Brighton and Hove showing various districts. The districts are arranged roughly from west to east and north to south. The following table lists the districts shown on the map:

District	Approximate Position
Patcham	North
Withdean	North-West
North Portslade	West
Hangleton & Knoll	West
Hollingdean & Stanmer	North-East
Moulsecoomb & Bevendean	North-East
Hove Park	West
Preston Park	West
South Portslade	West
Woodingdean	East
Wish	West
Goldsmid	West
Central Hove	West
Regency	West
Queen's Park	West
East Brighton	East
Westbourne	West
Brunswick & Adelaide	West
St. Peter's & North Laine	West
Hanover & Elm Grove	West
Rottingdean Coastal	East

Results

- Where to go -

- First, people seek local attractions that satisfy their social and recreational needs
- Second, people seek distant attractions with strong appeal
- The further away, the less attractive, unless the location provides unique experiences

Results

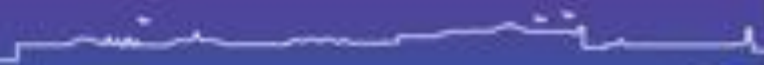
- Where to go -

- Locations that provide similar experiences compete
- For example St Anne's Well Gardens, Preston Park, Pavilion Gardens, and Queen's Park are city parks providing urban nature, and consequently compete
- The most local win

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Recommendations



Recommendations

- As mentioned above, the data quality is insufficient, and decisions based on the present survey results must be careful
- The results show what kind of information could be obtained from a proper survey based on a representative, random sample of the Brighton & Hove population
- The results are promising

Recommendations

- A new survey based on a representative, random sample of 1 % of the Brighton & Hove population is recommended
- The survey should be conducted by face-to-face interviews, to secure data quality

Recommendations

- Detailed case studies of specific areas in Brighton & Hove is recommended, to learn more about their qualities
- In particular, the Beach & Seaside area is interesting because of the diversity of experiences it provides
- May this diversity be carefully and creatively planned/managed/designed?

Recommendations

- Detailed studies of the city parks is also recommended, particularly St Anne's Well Gardens, Preston Park, Pavilion Gardens, and Queen's Park
- The diversity of experiences in these parks is important to understand in order to develop their attractiveness
- What makes them compete with each other

Recommendations

- A next step in developing a soundscape strategy for Brighton & Hove is to map all areas that fall under the four categories:
 - The Beach & Seaside
 - City Park
 - Peri-Urban Recreation Area
 - Down Town City

Recommendations

- Thereafter acoustic objectives for these areas are decided in agreement with the five categories of recreational soundscapes:
 - Urban Nature
 - Distant Nature
 - Urban
 - Seaside
 - Urban Beach

Questions

oan@psychology.su.se