# Geography Coursework





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# **Introduction**

I will aim to provide information to complete my hypothesis; 'Settlements in and around the Uttlesford District meet the needs of the residents living in those settlements.' I will use evidence from the fieldwork and various sources in books to contribute ideas in my conclusion. I will also be use different techniques to prove my theory, such as the 'Spearman's Rank', questionnaires and graphs to make my results more reliable.

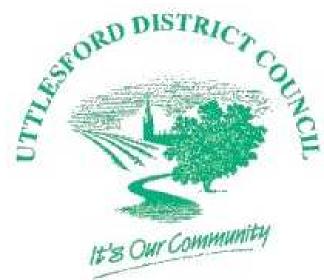
# **Hypothesis**

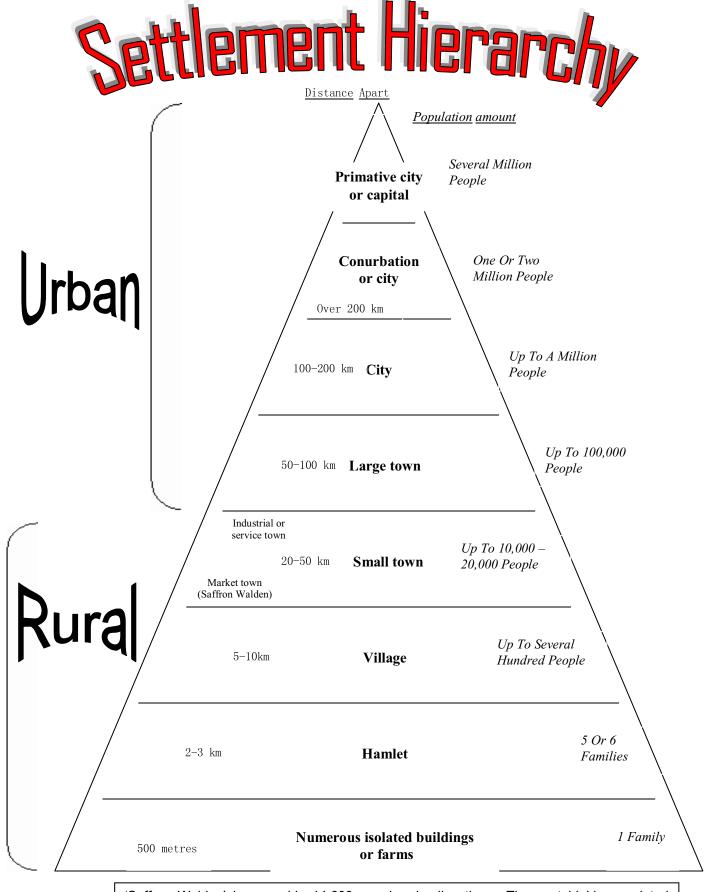
A hypothesis is a statement or a question that needs to be proven or disproved. My hypothesis is:

# Do settlements in the Uttlesford District meet the needs of the residents living in those settlements?

In order to determine whether that is true or false I will need to carry out the following:

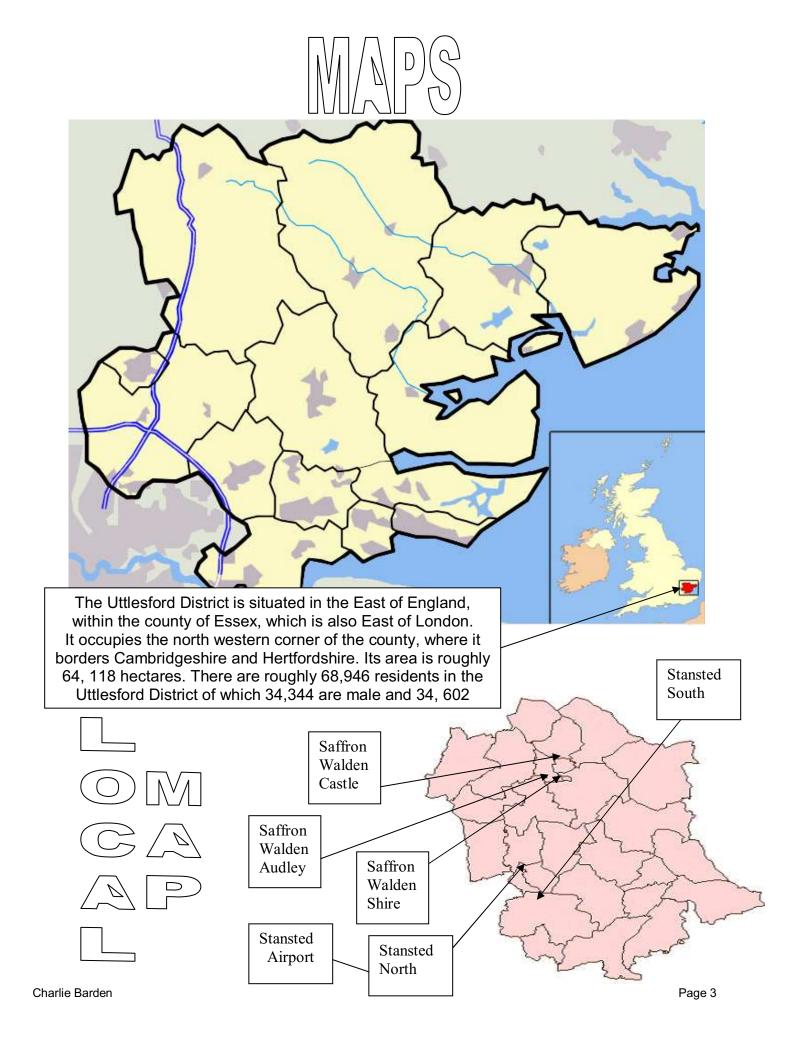
- Visit Bishops Stortford, a small town just outside the Uttlesford District to carry out questionnaires, surveys and gather primary and secondary information.
- Visit Saffron Walden, a small town in the Uttlesford District to carry out questionnaires, surveys and gather other primary and secondary information.
- Visit a smaller village, also in the Uttlesford District, to carry out surveys and gather other primary and secondary information.
- Use a database for grouping the questionnaires complication and then process results individually.
- Use a statistical test called 'Spearman's Rank Correlation Coefficient'.

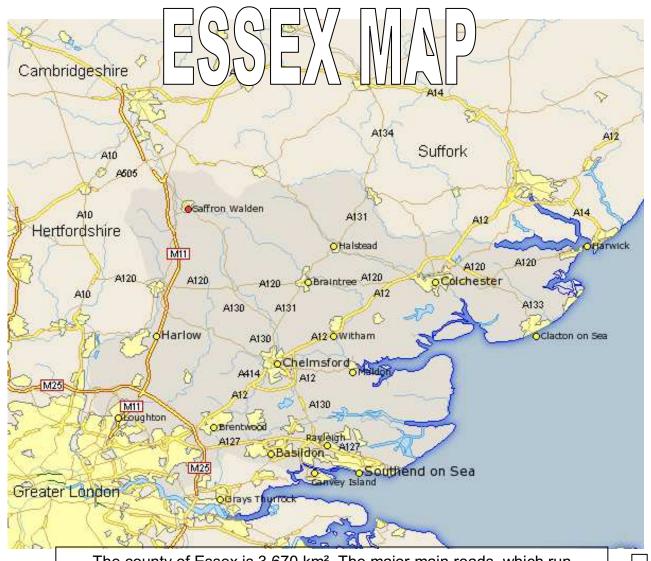


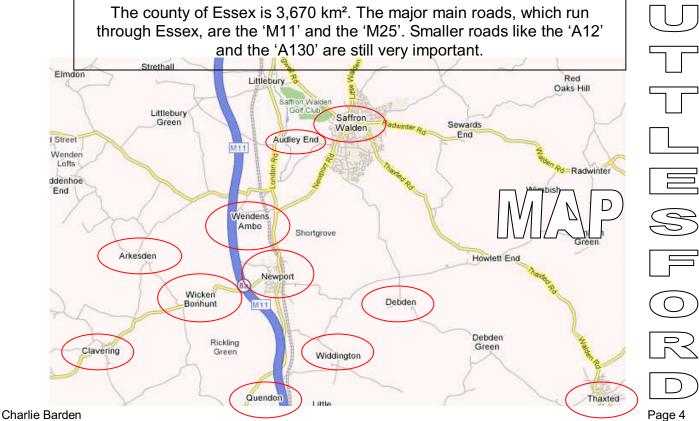


Charlie Barden

'Saffron Walden' has roughly 14,600 people who live there. The next highly populated settlement is 'Stansted tot' which occupies 5,700 people; therefore 'SW' is the only small town in the Uttlesford District, consequently, it should occupy the most services especially chain stores as the threshold population would be sufficient, I would also expect this nucleated urban area to have a large sphere of influence. Every other settlement I will be examining is a village.







# Key terms

I will use important key terms to aid answering my hypothesis;

**Sphere of influence –** Area served by a particular settlement.

I suspect that Saffron Walden has the largest sphere of influence, as it contains the most services, and the population is nearly three times greater than the next village. Small settlements like Wedens Ambo with a small population should have a low sphere of influence as the services won't be supported.

Range – How far people will travel to reach their destination.

I believe the people of villages or hamlets will travel greater distances to reach desired services - especially 'comparison goods'. This is because the smaller settlements won't be able to support the full range of services required.

**Threshold population** – *Minium number of people needed to ensure that the demand is great enough for a service.* 

As Saffron Walden is the only small town that I am ultimatley studying in the Uttlesford District it is most likely to maintain the popular chain and specialist services. Much smaller settlements wouldn't be able to sustain many stores as they don't have the population to do so.

**Comparison -** Evaluation of similarities and differences.

I will compare the population size of each settlement and the volume of services provided. I will measure where each settlement visits to reach a certain type of service to calculate if the needs are met (the hypothesis) and where the most type of service/store resides. I will compare Saffron Walden and Bishops Strortford – both small towns of similar size.

**Comparison Store** – High order goods which are usually expensive.

I would be surprised if there were a lot of comparison stores in each village as the 'threshold population' wouldn't be high enough to uphold each store. I would expect Saffron Walden to be able to maintain a number of high ordered goods, as the towns range must be high, including Saffron's economic value.

**Convenience** – Low order goods which are bought frequently and are cheap.

I would suspect that all settlements in the Uttlesford District would contain a store such as a corner shop, as the food which they sell are essential goods.

**Anomaly** – When something doesn't fit the general pattern

Statistically, there shouldn't be an anomaly in any form, otherwise human error will be the cause of this or the economic value of the settlement isn't high enough. Other services maybe special to the settlements, for example the 'Scuba Diving' shop in Stansted Mountfitchett.

Specialists – Specific goods or services.

I would expect settlements with a high economic value to have specialist stores. I would imagine each store would need a certain amount of threshold population to support the stores income, so settlements like Bishops Stortford and Saffron Walden wouldn't have a problem.

**Settlement Hierarchy** – *Settlements listed in order of importance.* 

I would expect that settlements with the most services are higher up in the settlement hierarchy as they would be more economically developed, otherwise it may be an anomaly.

**Hamlet -** Very small settlement with around 10 families living there.

I would guess the residents wouldn't need more than one covenience store as they would have a high range due to there being not many people.

**Village & Town** – A village occupies up to several hundred people where a large town has up to 100,000 and a samll town 10,000 – 20,000

This is convienent as Saffron Walden is the only small town I'm studying and all the other settlements are villages – apart from Bishops Stortford which I'm not fully analysising. Therefore, there should be more services in Saffron Walden.

**Conurbation & City** – A city contains roughly a million people and a conurbation has 2-3 mullion.

**District -** Local government areas called districts are used, or have been used, in several countries.

The only district I will be studying is the 'Uttlesford District' in Essex. The main settlement in this particular district is Saffron Walden.

**MED** – More economically developed

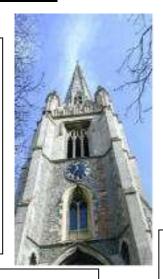
Bigger settlements, like 'Saffron Walden' have a larger gross domestic product per capita, that offer more services.

# **History of the Uttlesford District**

#### Saffron Walden:

# Saint Mary's Church:

The Parish church of Saint Mary the Virgin is the largest in Essex, with an overall length of 183 feet, whilst the height of the tower and spire is 193ft. The massive Norman stone church that was known to exist in 1130 and it was rebuilt and enlarged in the early form of the 'Decorated' period between 1250 and 1258.



# Quality of life:

In <u>2001</u>, Uttlesford was voted as the best place to live in England, in a survey by the <u>Sunday Times</u> newspaper. A range of factors, including housing costs, quality of schools, and low crime contributed to the overall result. It is also the healthiest place to Live in the UK, due to the relatively low level of obesity problems in the area.



Bridge End Garden is in fact a series of seven interlinked gardens laid out by the Gibson family in the nineteenth century. These grade II\* listed gardens are now leased to the District Council and are open to the public each day free of charge. Over the past two years an extensive restoration project, generously supported by the Heritage Lottery Fund, has been undertaken to return this historic corner of Saffron Walden to its former glory so that they can once again be enjoyed by visitors of all ages.



# Museum: Saffron Walden's

Saffron Walden's award-winning "friendly family-size museum" welcomes over 20,000 visitors a year, including families, groups, researchers and over 5,000 school children. This museum opened in 1835 and contains the ruins of the 12th century Walden Castle in the grounds.



# Walden Castle:

Saffron Walden also features the ruins of the 12th century Walden Castle, which, is thought to have been built by Geoffrey de Mandeville, the Second Earl of Essex. After the medieval period, the castle fell slowly into disuse, and much of the flint was taken and used, in the construction of local houses. All that remains today is the ruined basement.

37450 votes were cast in Uttlesford District.

Division	Elected Party
Dunmow	Conservative
Saffron Walden	Conservative
Stansted	Conservative
Thaxted	Conservative

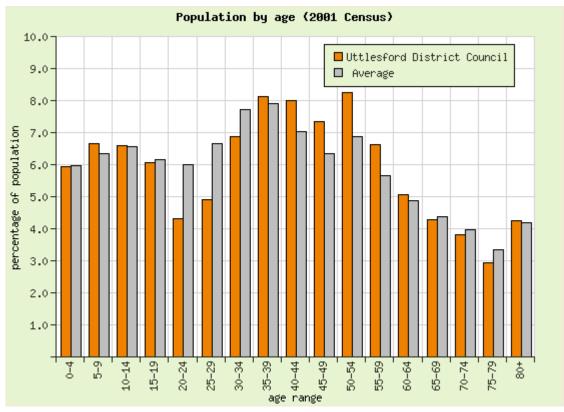
#### **Uttlesford District:**

The District of Uttlesford is an extensive rural area in the north west of the county. It has four centres: Saffron Walden (population 15,000), Great Dunmow (6,700), Stansted Mountfitchet (5,700) and Thaxted (2,600). They all have attractive historic cores with many buildings listed of special historic or architectural interest. There are many smaller settlements, the majority of which are designated 'Conservation Areas' whose character will be preserved and enhanced.

Population growth: - The District is located within the London Stansted, Cambridge, Peterborough 'Growth Area' in the Government's Communities Plan. The draft East of England Plan proposes that 400 homes a year, will be built in Uttlesford on average each year up to 2021.

Transport development: - The 950 hectare site of Stansted Airport lies within the district. One of the London airports, it handled nearly 22 million passengers in the twelve months to September 2005 and is expected to reach about 25 million passengers a year in 2007. In 2005, around 11,500 people, were employed at the airport. A planning application was submitted in, Spring 2006 to lift the conditions limiting the number of air passengers to 25 million a year and the number of air transport movements.

# Population range of the Uttlesford District Compared To National Average



#### Wicken Bonhut's needs

Wicken Bonhut is located near North Harlow. It is a small village and parish, on the north side of a tributary stream of the river Cam or Granta, 2 miles West by South of Newport Railway Station, and 5 miles South West of Saffron Walden. It contains 847 acres of land. Part of the parish (type of administrative subdivision) belongs to Miss Mary Webb, and a few smaller freeholders.



Wicken Bonhut maintains 256 people therefore, there are not many needs;

O-4 years – One nursery would be useful for the few toddlers that live in the settlement

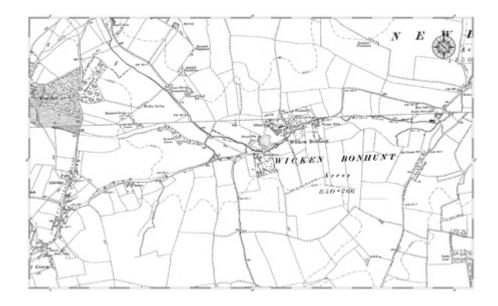
5-15 years – A social gathering area like a park or field, along with a primary or senior school but I doubt the threshold population can support it

16-19 years – Highlighted again, a senior school would be needed for the 16 year olds at their last year at school. A college or six form may be needed if it can be maintained

20-44 years – A convenience store would be necessary as over a quarter of this population is in this age group

45-64 years – Nature trails, woodlands and improved scenery could occupy this age group as it's fairly cheap to alter.

65+ years – Local medical care would be important. Residential areas like flats and retirement homes which would bring in money for the settlement



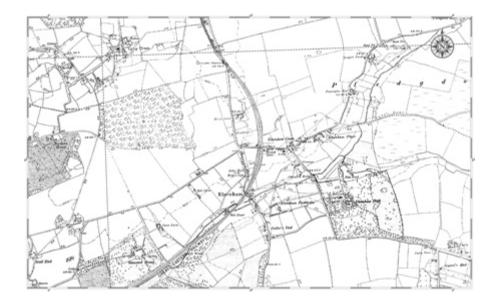
#### Elsenham

Elsenham is a small village in north west Essex. Its neighbouring towns include Bishop's Stortford, Saffron Walden, and Stansted Mountfitchet. The village is also approximately 3 miles from Stansted Airport. A highly publicised expansion of the airport could include new road and rail links passing within the village boundaries.

Elsenham contains 2691 people meaning many types of services maybe needed;

0-4 years –	A few nursery would be useful for the small percentage of toddlers that live in the settlement; a day-care center would be helpful aswell
5-15 years –	A playing area like a park or field, along with a primary and senior school

- 16-19 years A grammar school would be indulged for the 16 year olds and a six form or college would be recommended for the older teenagers
- 20-44 years Quite a lot of comparison stores would be necessary as most of the population is in this age group, specialist stores would be wanted along with popular chain stores if they could be supported
- 45-64 years Excellent transport links to and from the town as most of the residents would still be working
- 65+ years -Local medical care would be important also with residential areas like retirement homes.



#### Henham

Henham, or Henham-on-the-Hill is a small village near Stansted Airport, located in Uttlesford, Essex. It has a population of around 1200 and used to be a station along the London-Cambridge train connection. Its local pub is The Cock. The church is called St Mary's.

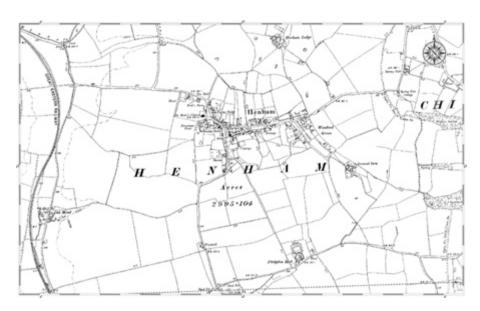
Henham hosts in the final weeks of May an annual 10K run.

It has an award winning local shop which is run by the community that has been thriving for almost 10 years.

Henham has 912 people living there, so quite a few services should be offered;

0-4 years –	A nursery, day-care center or somewhere to play alike a hall
	would be needed for the few toddlers that live in the settlement

- 5-15 years A social gathering area like a park or field, along with a primary or a senior school
- 16-19 years Highlighted again, a senior school would be needed for the 16 year olds at their last year at school. A college or six form would be useful if it can be sustained
- 20-44 years Convenience stores would be necessary as over a third of this population is in this age group, although a comparison store probably would not be supported (threshold)
- 45-64 years Nature trails, woodlands and improved scenery could occupy this age group along as their fairly cheap to produce
- 65+ years Local medical care would be important with residential areas like a block of flats or a set of retirement homes.



# <u>Arkesden</u>

Arkesden is located 7 km (5 miles) southwest of Saffron Walden, is around 6 miles from Bishop's Stortford in nearby Hertfordshire and is 35 km (22 miles) northwest from the county town of Chelmsford.

Arkesden keeps 327 people living there, consequently there are not many needs;

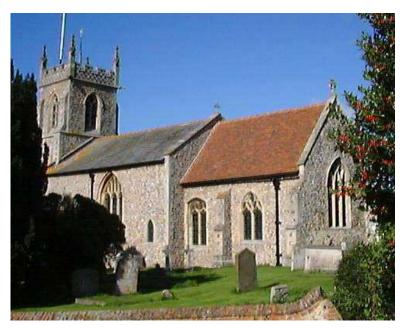
0-4 years –	One nursery would be useful for the few toddlers that live in the settlement
5-15 years –	A social gathering area like a park or field in where sport can be played, schools probably won't be maintained
16-19 years –	A senior school would be needed for the 16 year olds at their last year at school but it's unlikely. A college or six form would be needed but unaffordable
20-44 years –	A few convenience stores would be necessary as over a quarter of this population is in this age group, although a comparison store probably wouldn't be supported (threshold)
45-64 years –	Nature trails, woodlands and improved scenery could occupy this age group
65+ years –	Local medical care would be important with residential areas like one block of flats or one set of retirement homes.



#### **Widdington**

Widdington has one of the finest surviving medieval barns in eastern England, tree-ring dated to the mid-15th century, with a breathtaking aisled interior and crown post roof, the product of some 400 oaks.

Widdington sustains 447, so there does not really need to be many services offered



0-4 years – Only one nursery would be needed for the few toddlers that live in the settlement

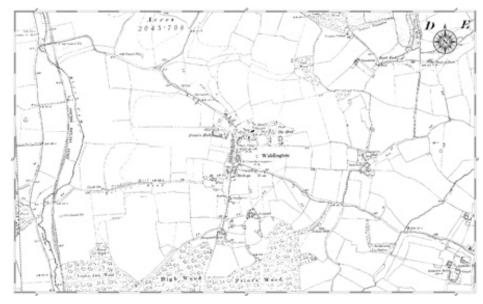
5-15 years – A social gathering area like a park or playing field, along with maybe one primary or senior school

16-19 years – College like facilities or youth centers would be used by this age group

20-44 years – A few convenience stores would be necessary as over a quarter of this population is in this age group, although a comparison store probably wouldn't be supported (threshold)

45-64 years – Nature trails, woodlands and improved scenery could occupy this age group along with specialist stores if need be

65+ years – Local medical care would be important with residential areas like flats and retirement homes.



#### **Newport**

Newport is a village in Essex near Saffron Walden, in which Newport Free Grammar School is located. Chef Jamie Oliver went to Newport Free Grammar School along with Charlton Athletic's professional footballer Matthew Holland.

Newport has 2178 residents as then lots of services must be offered

0-4 years – Maybe one or two day care centers or nurseries would be recommended, as the population is substantially high

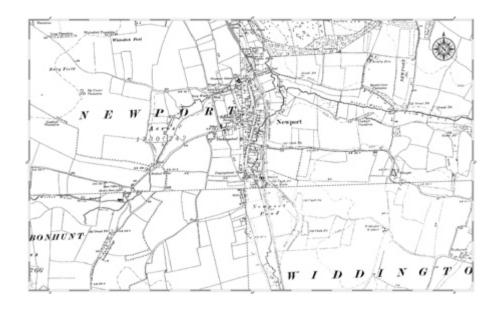
5-15 years – A social gathering area like a park or playing field, along with a primary and a senior school

16-19 years – Highlighted again, a senior school would be needed for the 16 year olds at their last year of education. A college or six form may be desired

20-44 years – A few convenience stores would be necessary as over a quarter of this population is in this age group and a few comparison stores

45-64 years – Nature trails, woodlands and improved scenery could occupy this age group along with specialist stores if need be

65+ years – Local medical care would be important with residential areas like flats and retirement homes.



## **Quendon & Rickling**

Quendon is a linear village in the English county of Essex. It's located on the B1383 (formerly the A11 trunk road) between Saffron Walden and Bishop's Stortford.

Quendon is part of Quendon and Rickling civil parish and the district of Uttlesford. The first mention of a postal service in the village was in 1793 and Quendon had a Penny Post service from 1813. The village post office closed in February 2008.

Quendon & Rickling have 562 citizens that's why not many services are needed

0-4 years –	One nursery v	vould b	e useful	for th	he few	toddlers	that	live in
•	the settlement							

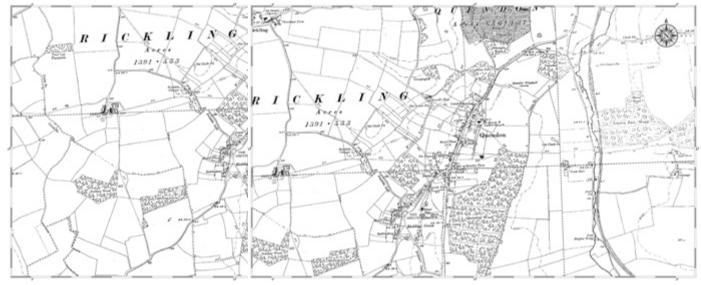
5-15 years – A social gathering area like a park or field, along with a primary or senior school

16-19 years – Highlighted again, a senior school would be needed for the 16 year olds at their last year at school. A college or six form may be needed but unlikely to be supported

20-44 years – A few convenience stores would be necessary as over a quarter of this population is in this age group, although a specialist store probably wouldn't be supported (threshold)

45-64 years – Nature trails, woodlands and improved scenery could occupy this age group along with specialist stores if need be

65+ years – Local medical care would be important with residential areas like flats and retirement homes.



#### **Wendens Ambo**

Wendens Ambo is a small village of approximately 400 people in Essex, England. Its unusual name originates from the joining of two villages, Great and Little Wenden, to form Wendens Ambo, meaning "both Wendens".

Wedens Ambo has 418 people living there so there shouldn't be many services

0-4 years –	One nursery would be useful for the few toddlers that live in
	the settlement

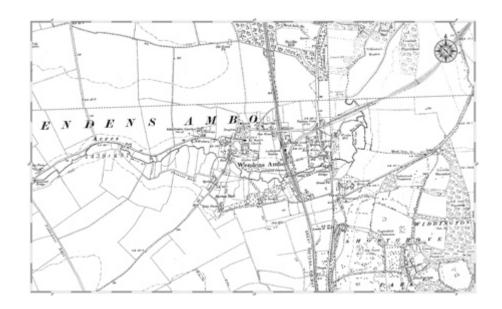
5-15 years – A social gathering area like a park or field, along with a primary or senior school

16-19 years – Highlighted again, a senior school would be needed for the 16 year olds at their last year at school. A college or six form may be needed

20-44 years – A few convenience stores would be necessary as over a quarter of this population is in this age group, although a comparison store probably wouldn't be supported (threshold)

45-64 years – Nature trails, woodlands and improved scenery could occupy this age group along with specialist stores if need be

65+ years – Local medical care would be important with residential areas like flats and retirement homes.



## Saffron Walden

45-64 years –

is a small market town in the Uttlesford district of Essex, England. It is located 12 miles (19 km) north of Bishop's Stortford, 15 miles (24 km) south of Cambridge and approx 35 miles (56 km) north of London. The town retains a picturesque, rural appearance and many very old buildings dating from the medieval period onwards. In 2001 the parish had a population of 15,095 although this has increased marginally since then.

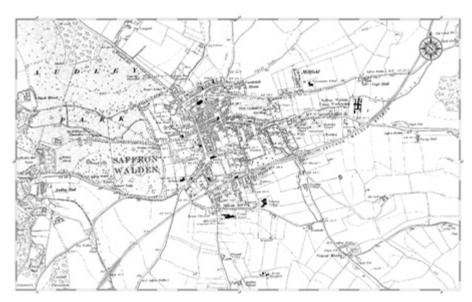
Saffron Walden contains 14608 people, there will be loads of comparsion services

0-4 years –	Large nurseries, day-care centers, private halls for interaction etc. is needed. Along with 'baby shops' (specialist service)
5-15 years –	Social gathering areas like a parks or fields with football/rugby posts along with grammar senior schools and primary
16-19 years –	A senior school is needed for the 16 year olds at their last year at school. Specialist colleges or various six forms should be supplied
20-44 years –	Shopping mails which contain: specialist, chain, comparison, professional and convenience stores

65+ years – Very reliable medical care would be important with expensive residential areas like popular flats and retirement homes.

residents would still be working

Excellent transport links to and from the town as most of the



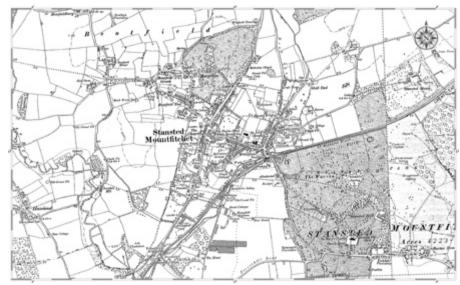
#### **Stansted**

Stansted was a Saxon settlement (the name means 'stony place' in Saxon) and pre-dates the Norman invasion of England, although it wasn't until this invasion that it inherited the suffix Mountfitchet, from the Norman baron who settled there. A small remnant of his castle remains, around which a reconstruction of an early Norman castle has been built. Believed to have been fortified originally in the Iron Age, and subsequently by the Romans and Vikings, construction of the Norman castle began in 1066.

Stansted has 5708 people there, surely there will be many comparison stores

0-4 years –	Nurseries	would	be	useful	for	the	toddlers	that	live	in	the
	settlement	along	with	a day-	care	cen	ter				

- 5-15 years A social gathering area like a park or field, along with a primary and a senior school
- 16-19 years Highlighted again, a senior school would be needed for the 16 year olds at their last year at school. A specialist college and six form may be needed
- 20-44 years Comparison stores would be necessary as over a quarter of this population is in this age group, specialist, professional and a few chain stores would also be expected
- 45-64 years Excellent transport links to and from the town as most of the residents would still be working
- 65+ years Local medical care would be important with residential areas like flats and retirement homes.



#### **Thaxted**

Thaxted appears in the Domesday Book of 1086 as *Tachesteda*, Old English for "place where thatch was got." Once a centre of cutlery manufacture, Thaxted went into decline with the rise of Sheffield as a major industrial centre. A light railway, the Elsenham & Thaxted Light Railway, eventually opened in 1913, though the railway itself never reached nearer than three-quarters of a mile (1.2km) from the town, as building earthworks across the RiverChelmer proved too costly.

Thaxted occupies 3146 so there should be a range of services

0-4 years –	Nurseries	would	be	useful	for	the	toddlers	that	live	in	the
-	settlement										

- 5-15 years A social gathering area like a park or field, along with a primary and a senior school
- 16-19 years Highlighted again, a senior school would be needed for the 16 year olds at their last year at school. A college or six form may be needed
- 20-44 years Comparison stores would be necessary as over a quarter of this population is in this age group, along with professional stores
- 45-64 years Excellent transport links to and from the town as most of the residents would still be working
- 65+ years Local medical care would be important with residential areas like flats and retirement homes.



#### Debden

Debden is a small rural village in the Uttlesford district of Essex in the East of England.

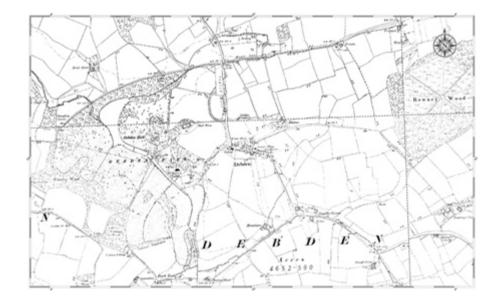
It is located 4 miles (6 km) from Saffron Walden and 17 miles (27 km) from Cambridge.

RAF Debden is nearby and played a role in the Second World War.

Debden maintains 816 residents so there has to be convenience stores there

0-4 years –	A nursery or day-care center equipped with many staff would
	be useful for the many toddlers that live in the settlement

- 5-15 years A social gathering area like a park or field, along with a primary or senior school
- 16-19 years Highlighted again, a senior school would be needed for the 16 year olds at their last year at school. A college or six form may be needed
- 20-44 years A few convenience stores would be necessary as over a quarter of this population is in this age group, although a comparison store probably wouldn't be supported (threshold)
- 45-64 years Nature trails, woodlands and improved scenery could occupy this age group along with specialist stores if need be
- 65+ years Local medical care would be important with residential areas like flats and retirement homes.



#### Clavering

Clavering is a village in north-west Essex in England. The village's name means "place where clover grows". Clavering is situated 20 miles (32km) south of Cambridge on the River Stort. It is one of over 100 villages in the district of Uttlesford. Located just 10 miles from London Stansted Airport, the village may be affected by plans to expand the airport.

The noted Chef and TV presenter Jamie Oliver comes from Clavering. His father Trevor runs one of the two village pubs, The Cricketers, which has now become quite a large attraction for people from different parts of the country and locals alike.

Clavering has 1133 residents, there must be convenience and comparison stores

- 0-4 years Nurseries and day-care centers would be useful for the toddlers that live in the settlement
- 5-15 years A social gathering area like a park or field, along with a primary and a senior school
- 16-19 years Highlighted again, a senior school would be needed for the 16 year olds at their last year at school. A college or six form may be needed
- 20-44 years A few professional stores would be necessary as over a quarter of this population is in this age group, although a chain store probably wouldn't be supported (threshold)
- 45-64 years Nature trails, woodlands and improved scenery could occupy this age group along with specialist stores if need be
- 65+ years Local medical care would be important with residential areas like flats and retirement homes.



# **Land Use Map**

The main services' are chain shops; which are situated in the middle of the market area, this maybe because people will pass through the market center as it's a prime area. Moreover, the plot of land will cost more to rent there so usually only the popular stores can afford it.

Professional services, especially banks, are most useful to consumers wishing to spend money in the town – improving Saffron Walden. That's why these buildings are also positioned in the centre of town, for easy access and in the most populated area.

The residential homes and personal services are on the outskirts of the town, mostly on the South-West side, to ensure easy access to and from the main market, also decreasing the chances of vandalism from tourists especially if they're drunk! Moreover, if the homes were situated in the middle of town, noise and anxiousness would keep the residents awake, also car parking spots would not be vacant. It can be said that only one type of personal service is necessary in a settlement (if the threshold population can be supported), therefore it is not as important where it is placed.

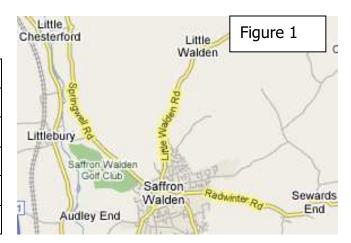
Tourist related buildings such as catering/entertainment services are located mostly in the Eastern region of the market – possibly to separate from residential areas. Furthermore, the main road of 'High street, which runs through Saffron Walden is on the opposite side of town, this could be another reason why tourist facilities are on the 'East-side' as, heavy traffic would be un-attractive to visitors and particularly more noisy at night.

There are only two supermarkets in the town center, one of which is large in size. This shows that only small amounts of the buildings need to be supermarkets, as they can support the whole area; convenience stores, this way, simply are not necessary as low order goods are sold in supermarkets. However, the convenience stores which are present are at the other side of the market so low order goods can be sold to people before they reach the market center.

Chain stores need at least a certain amount of threshold population to support their business, as do many other services. Saffron Walden contains around 15,000 residents in which stores like 'Game' etc. need 20,000 plus, ensuring people from other settlements are needed to provide to support each store.

From the amount of comparison services; professional, chain etc., it's noticeable that the businesses aren't just supplied for the local residents. This can be supported by the lack of residential homes in the town centre. Conclusively, the sphere of influence must be high as, the settlements next to Saffron Walden have a fairly low population count (figure 1)

Town	Population * roughly
Audley End	300*
Littlebury	1623
Little Chesterford	205
Little Walden	Unknown
Sewards End	Unknown



This means that other settlements further from Saffron Walden use the services there; enlarging the sphere of influence, otherwise, the stores won't be sustained.

#### Other land use marks in Saffron Walden

#### Saffron Walden Golf course

This 6364 yard course is one of the finest parkland golf courses in East Anglia.

The club is positioned at the top of a hill, offering wonderful views of Saffron Walden and Audley End House from almost every tee.

A golf club needs a huge area of land, which could be used for other purposes such as agriculture etc. Therefore, a lot more services could replace the golf course to increase the settlements economy, which suggests the golf course has a high population threshold, which must be supported, and the sphere of influence must also be high. If not, the local council wouldn't be able to afford the golf club's up-keep.





# Land Use in Bishop Stortford and Saffron Walden

Bishop Stortford: Figures 2, 3, 4, 6

Bishop Stortford occupies around 35,000 people. The large town is just outside of the Uttlesford district and offers 83 services compared to the small town of Saffron Walden of which sustains 129. This set of results is therefore an anomaly as the range between both towns is roughly 20,000 in favour of Bishop Stortford – figures 4 and 5 support this.

It goes without saying, Bishop Stortford can sustain most threshold populations due to the number of residents. This is why chain stores are the most frequent service, this may also be supported by the vast sphere of influence Bishop Stortford maintains (trip lines).

Comparison services like specialist stores and catering/entertainment businesses are also common. As there are many hamlets and villages surrounding Bishop Stortford and the closest town is 12 miles (19 km) north, Saffron Walden. The range to reach the unique businesses will be extremely high as it's the closest place that offers the goods.

Obviously, Bishop Stortford is one of the most economically developed settlements as convenience stores are in the minority. Due to the importance of the comparison services low order goods are simply not really needed. Chain stores, like Woolworths, Marks & Spencer, Greggs the Bakers, etc. can support the cheap, frequently brought items. However small corner shops are probably still present.

Professional stores are infrequent throughout most districts in the area, this being why a small percentages of the land is used.

The whole settlement cannot be occupied by services, which explains why the remaining areas are probably fields, agricultural areas or residential homes.

Saffron Walden: Figures 3, 4, 5, 6

There are around 15,000 residents living in Saffron Walden, which offers roughly 129 services. This settlement is in the North-west corner of the Uttlesford District and is surrounded by smaller villages and hamlets.

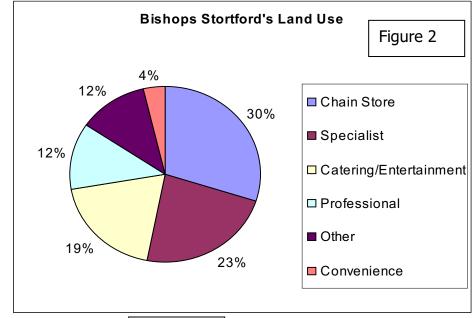
Most of the areas in Saffron Walden are covered with buildings or 'man-made' materials, which shows that the settlement is not exactly environmentally friendly – habitats have most probably been destroyed to make way for buildings.

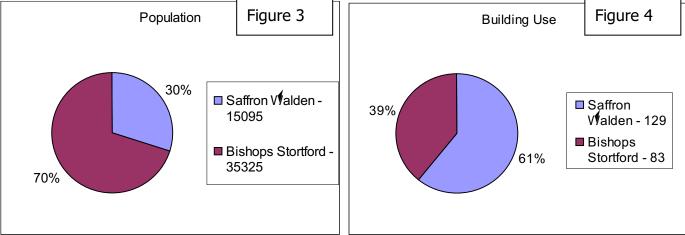
Nearly a third of the buildings in Saffron Walden are most likely specialist stores; as theses types services aren't offered for miles around explaining the high sphere of influence. A smaller proportion are most likely to be charity shops, as it is almost certain you will not find any of these businesses in smaller villages.

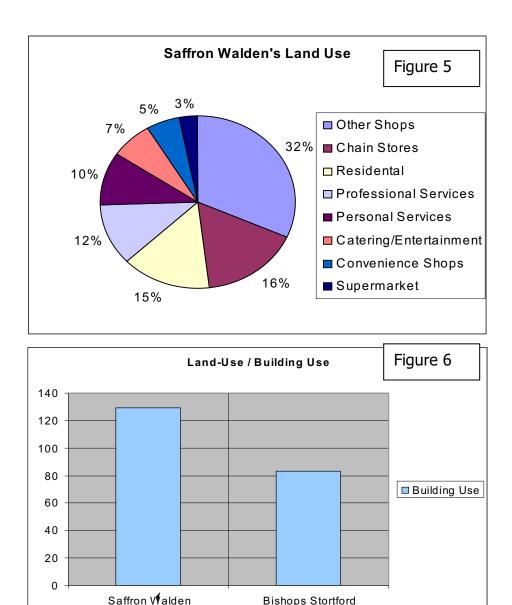
Due to residential areas being a big proportion of the buildings housing estates are expected to be right in and around the city, proving numerous estate agents can be found in the market. This may even suggest the town could be overpopulated.

Chain stores, professional and personal services are also common, indicating the threshold population is high enough from the hamlets and villages around the town including Saffron Walden's own citizens to support each service. People who own these services should make a good income as people travel at a high range to 'spend on' these goods making the sphere of influence larger.

Other comparison services like catering/entertainment and supermarkets are still necessary in any large settlement. However, only considerable amounts of these services are actually needed to support the high population, making the supermarket a frequently used service as it sells low order goods. Everyone goes to that one supermarket/catering service, so no more are needed. This can be linked with convenience stores that are most likely to be corner shops, supporting the citizens with their daily needs.







#### **Comparing Bishop Strotford and Saffron Walden:**

Bishop Stortford offering fewer services than the smaller populated Saffron Walden is an anomaly; this could indicate that the settlement is less economically developed. (figures 3, 4 and 6)

The population of Bishop Stortford is over twice the size of Saffron Walden meaning the residential area percentage would have thought to be larger. However, this is also an anomaly as at the most, the residential areas can be 12%, this is without mentioning other land/building uses (figure 1,) compared to Saffron Walden's.

Bishop Storford has a lot more chain stores, which would make sense as more people from around the area can support the population threshold. This may attract more tourism that would further prove useful for the convenience stores and personal services. Bishop Stortford also offers а lot more catering/entertainment services, showing more tourists visit the settlement. Otherwise, having these amounts of services would be pointless. Further, hotels and camps usually offer these services concluding tourists are present.

## **Trip Lines**

The trip lines I have created show clearly the range of which people travel;

#### Convenience - Main food shop

I have noticed that most of the smaller villages do not have a main food shops, some settlements only have tiny convenience stores. The two main shopping places where convenience goods can be bought are Saffron Walden and Stansted Mountfitchet. This however, isn't surprising as Saffron Walden has two supermarkets and many convenience stores which can be easily accessed by the 'High Street' main road meaning quicker transport than smaller roads etc.

Whereas this shows the hypothesis is misleading; the range for convenience goods therefore fairly high. As roughly half of the small settlements villages are having to travel out of their neighborhood to reach convenience stores as their settlement doesn't maintain one; so about 50% of needs are met.

Low order goods aren't considered as important, that's why they're cheap; there not necessary in everyday life. Food can be purchased from supermarkets weekly from nearby settlements so there's no need for convenience stores which sell a small variety of food. Moreover, modern-day technology like televisions and radios, which portray the news, are usually preferred to newspapers; that are also classified as low order goods so there isn't much, so there not really needed.

#### **Comparison** - Bank

Classified as more important than convenience stores, comparison goods are far more unique. There are only four settlements with their own banks that all have a population of over 1,000 people, showing that the amount of people must have an influence in where comparison services are placed. However, each bank is more than less evenly spread through out the area I am studying, highlighting the comparison stores may have been placed in these settlements on purpose. But obviously less economically developed settlements wouldn't be able to maintain comparison services for safety reasons etc.

Statistically, the needs aren't met, so the hypothesis is deceptive; as only small minorities of the settlements endorse comparison services, especially banks, so long distances need to be traveled to reach high ordered goods (the range for this reason is long). However, citizens are clearly prepared to travel as otherwise the district would occupy more banks. Moreover, money that's withdrawn from the bank can be obtained in high amounts so the regular visits aren't required, alike other high order goods.

Human error is also accounted as smaller settlements such as 'Arkesden' are traveling much longer distances to banks instead of going to 'Clavering'. Suggesting a new comparison service has been produced; people maybe unaware, or disregard change in their normal routine.

#### Leisure - Cinema

Leisure services aren't necessary at all in any settlement, it's a voluntary activity which attracts tourism. More economically developed settlements are the only areas which contain these types of services. There are only two places in the Uttlesford District with cinemas and one in Cambridge. This most certainly highlights human error, as I'm not sure why residents of 'Wedens Ambo' would travel North to Cambridge when they could travel an eighth of the distance to 'Saffron Walden'!

As leisure services are not compulsory it doesn't really relate to the hypothesis, but nevertheless the voluntary leisure services are not met.

#### Health - Dentist

Health services are extremely important in any county/district. More economically developed countries, like England, maintain additional health services, advanced equipment and improved products. Medical services, especially hospitals, can support hundreds of thousands of people; implying the threshold population for dentists in the Uttlesford District are high but nevertheless supported. Unsurprisingly both towns offer various medical services in them and there's a high range from settlements traveling to them.

Not every settlement offers health services so my hypothesis is deceiving. Small settlements are unable to support important services so many are scattered randomly in most districts. This is because most health services are used in the case of emergencies, which occur at random intervals and are irregular, but as most instances are life risking, the range of which the services are offered must be even. Other health services like dentists etc. are rarely visited by on person, at least twice a year, which supports the view that not many of these services are needed in a district.

Human error is highlighted as 'Wedens Ambo' travels to 'Newport' to reach a health service but the people of that settlement go to 'Saffron Walden.' This suggests that this particular service is probably new as people use 'Newport'. However, prescriptions are still likely to be intact in 'Saffron Walden' meaning change is unnecessary.

#### Anomaly

The village of Henham has a fairly high population count of about 1,240, but yet, there are only thirteen services offered there. According to the Spearman's rank correlation coefficient there should be around 25 services, which is nowhere near. This is hugely surprising as Henham isn't near any settlements with a high amount of services. Highlighting again how long the range is; the residents travel to other settlements for health, comparison and leisure services.

# Spearman's Rank

The Spearman's Rank is a mathematical test to show a relationship between two different factors. This relationship is shown usually on a graph. If the correlation is 1 it is a perfect positive, -1 is perfect negative and if it is near 0 it has no correlation. If it is near 1 it is a strong positive correlation and if it is near –1 it is a strong negative correlation.

The formula for Spearman's Rank is: R=1- $\frac{6\Sigma d^2}{N^3}$ 

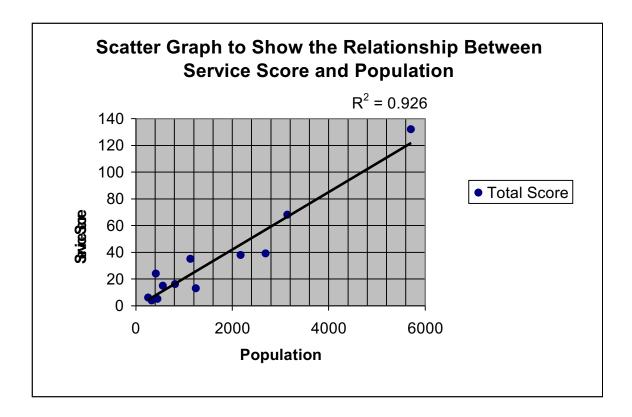
Settlements I have chose to use in the Uttlesford District:

Settlement	Population	Total	Population	Score	Rank	Different
		Score	Rank	Rank	Difference	Square
Arkesden	327	4	2	1	1	1
Clavering	1133	35	7	8	1	1
Debden	816	16	6	6	0	0
Elsenham	2691	39	10	10	0	0
Henham	1243	13	8	4	4	4
Newport	2178	38	9	9	0	0
Quendon &	562	15	5	5	0	0
Rickling						
Stansted	5708	132	12	12	0	0
Thaxted	3146	68	11	11	0	0
Wendens	418	24	3	7	4	4
Ambo						
Wicken	256	6	1	3	2	2
Bonhnt						
Widdington	447	5	4	2	2	2

#### **Spearman Rank Results**

From using the Spearman's rank correlation coefficient formula, I have found the total to be **0.926**. Therefore, there is a very strong positive realtion between a settlements population and the amount of services it maintains.

This shows that inorder for services to thrive, in economic terms, there must be a roughly high amount of population to support it. Otherwise, the threshold will not be met and the buisness will lose money. My hypothesis is therefore mostly true, there are, in most cases, enough services to meet the needs of the residents in each settlement. Even if the exact services which are needed aren't in the settlement, the citizens are prepared to travel to a long distance/range to get to them (trip lines). Concluding, the needs are met in the whole Uttlesford District.



#### **Anomaly**

Some settlements which are fairly far away from larger settlements, like both towns (Saffron Walden and Bishop Stortford) portray an irregular pattern; the service score is to high for the population. The two settlements are 'Clavering' and 'Wedens Ambo' – both are fairly near each other. If there were to many services in a settlement I would have thought that not all of them would be supported. This is all the more surprising as they're both by each other, neighbours from the other settlement wouldn't make a 'service difference', this surely means the buisnesses would have had to be terminated. Although saying this, it is not shown which type of services there are in these settlements, there could be many convenience stores which obviously doesn't need a high threshold population. However, Wedens Ambo has a train station, which is unique for a small village with a low population, but this suggests that the many services could actually be supported from tourists using this cheap and fast type of transport.

Other settlements that also have an irregular pattern; 'Elsenham' and 'Henham' that again are literally next to each other. They have a high population with low services. Both settlements aren't near a town either so it's surprising that there are a low number of services offered. They both should have a high traveling range, or the services they have are different types so there would not be need for anymore. Again saying this, I was unable to find which type of services there are in these settlements, there might only be a high proportion of convenience stores which obviously doesn't need a high threshold population.

# **Sphere of Influence**

#### Saffron Walden

The sphere of influence for Saffron Walden stretches as far as Oaklington, North-West of Cambridge. It's remarkable that this large town occupies roughly 250,000 residents around the town centre who visit the 15,000 populated Saffron Walden.; with such a high population you would expect Cambridge to maintain its own services. However, this maybe because Saffron Walden has a lot of specialist business; each particular store is usually rare in a District, but they only cater for a small minority of the population at certain times, meaning Cambridge residents only visit Saffron Walden for these stores as there aren't any in their area. This is supported by the building use graph (figure 5).

Saffron Walden's sphere of influence also extends as far South of Harlow, which has a population of about 78,000, West to Stevenage – 79,000 and East all the way to Barking, which more than highlights the importance of Saffron Walden and their unique services. The range of which is obviously extensive. Smaller settlements inside of these regions also depend on Saffron Walden, as they can't sustain as many services it shows the importance.

This proves the hypothesis is incorrect as other settlements use Saffron Walden's services; however, it shows from using modern-day transport people don't mind traveling long distances/ranges – the whole districts needs are met.

#### **Bishop Stortford**

Bishop Stortford's sphere of influence also passes by Harlow; probably because the range isn't that long and some services can't be found in Harlow. But interestingly, residents of Saffron Walden also use Bishop Stortford, maybe because there are a lot of tourist facilities or unique specialist services; so the range for a vacation isn't that high. This is supported by figure 2. Bishops Stortford is proven imperative as smaller settlements, like Langely etc. use the village's services as they can't maintain there own. Otherwise, their range would be longer to travel to larger settlements like Saffron Walden.

I am stunned to find that there are a lot more specialist stores in Bishop Stortford than there are in Saffron Walden, but Saffron has a much higher sphere of influence. Perhaps Bishop Stortford's specialist services are similar to others in the district. Alternatively, human error could be the reason why residents of places alike Stevenage travel a longer range to the services in Saffron Walden.

As some settlements use both Saffron Walden and Bishop Stortford it proves different types of a particular service/s that are high order must be offered in one settlement but not the other.

# Ways of travel

Saffron Walden: Figure 7

The majority of people use cars as away of transport in Saffron Walden, but not many people use the bus of other means of transport. I suspect the house prices in Saffron Walden are above average or at least fairly high, as so many services are offered and there's good education. Leading me to believe most families own a car and for that reason use them as there main use in transport.

Saffron Walden contains a large variety of services in a wide area, which suggests that's the reason why so many people chose to walk; they simply don't need to travel far to reach any services, choosing to walk is the health and environmentally friendly option.

This would direct me to believe that there aren't many bus services in Saffron Walden. As already explained, residents think walking is the best way of transport. However, for longer distances vehicles would be needed. Just over 25% of the population are under 19, therefore, they are unable to drive proving buses are still used and needed. I suspect trains are the other main way of transport, which highlights how important Saffron Walden is from tourists using their services – getting there by train. Smaller settlements must use Saffron Walden, like Wedens Ambo, as there is no other reason for them to have train stations, as they hardly have any of their own services for themselves.

#### Bishop Stortford: Figure 9

Most people in Bishop Stortford use cars to get around, therefore as the small town is near Cambridge, which maintains Cambridge University, each family living in a residential building is more than likely to have a car. Furthermore, the settlement must be economically developed to contain over 80 different services, let alone transport systems etc. Leading on from this, I would expect there to be a train station, which travels through Cambridge as of figure. In addition, a train station could be used for residents to reach Saffron Walden (sphere of influence), and among other places.

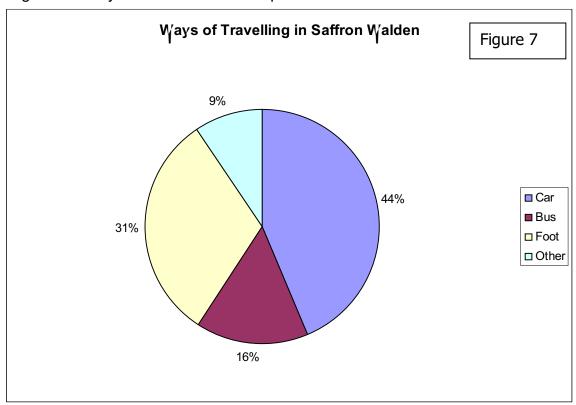
The settlement contains around 35,000 people meaning the area must be very large which explains the reason for bus transportation. People wouldn't be able to walk long distances in a short period of time, or even in bad weather. Although, people would walk shorter distance to the transport services, or the businesses Bishop Stortford has.

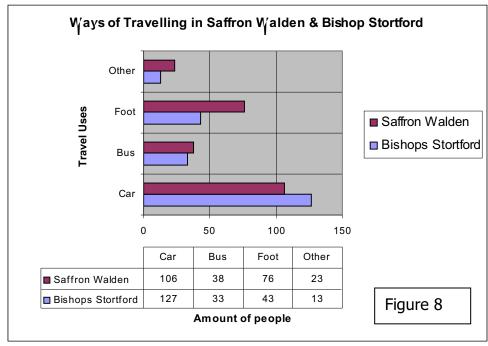
#### Comparing Bishop Strotford and Saffron Walden: Figure 8 and 10

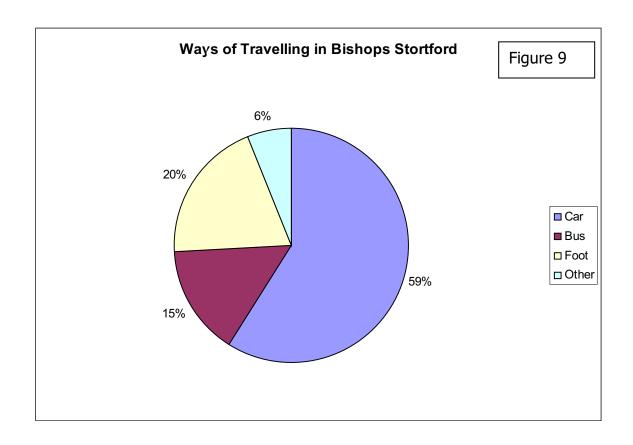
Both ways of transport in Saffron Walden and Bishop Stortford are similar, each choosing to use a car most frequently. This isn't surprising as it's a fast way of transport and people can chose their own destination and travel route. I would

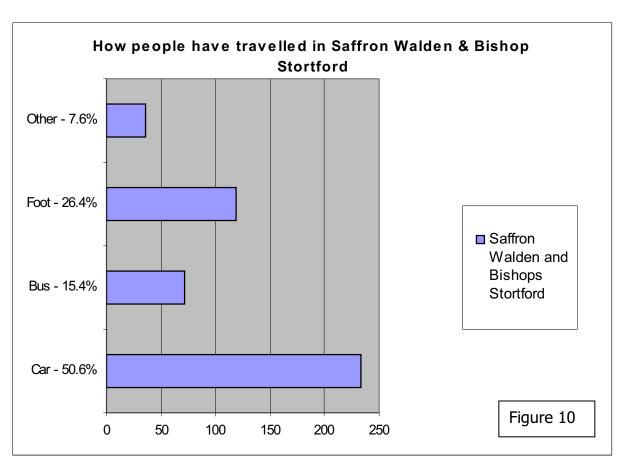
have guessed cars were used more in Bishop Stortford, as less services were offered and there were probably fewer high order goods, such as specialist stores etc. (figure 6). People chose to walk more in Saffron Walden also probably because there are more services there.

Buses are used normally used so parking isn't an issue and another means of cheap transport where no skills are needed. Therefore, both settlements should be similar. As already stated both settlements are likely to have train stations proving this is likely to be the 'other' transportation use.









# **Reasons for visiting**

Bishops Stortford: Figure 12

As figure 12 shows, the main reason for visiting Bishops Stortford would be for 'shopping.' The centre has a wide range of specialist shops and chain stores and also quite a few catering and leisure spaces, ie, public houses, café's and restaurants, which also shows that the town also attracts people for 'leisure.'

With quite large retail centres in both Bishops Stortford and Saffron Walden along with many banks and financial establishments, the graph shows that 'work' is another reason for many visitors to both towns. Obviously, the high numbers of retail outlets need people to work in them.

The 0% figure for 'education' may indicate that the people who attend the schools and colleges around Bishops Stortford already live in the town, rather than having to travel into it. Due to the fact that Bishop Stortford is in easy reach of the university town of Cambridge, this may mean that people travel out of the town for their further education, or move into the town so their children don't have to travel too far.

Saffron Walden: Figure 11

As figure 11 shows, the main reason for visiting Saffron Walden would also be for shopping. Even though the population of Saffron Walden is lower than Bishops Stortford, by about 20,000, the number of services in the area is known to be higher. This would indicate that more people have to travel into Saffron Walden for 'work', hence the higher figure for this category as well.

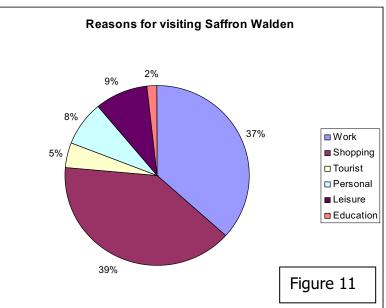
The 5% 'education' figure also shows us the existence of schools and colleges in the area that attract people to travel into further distances for as opposed to Bishops Stortford with the 0% figure.

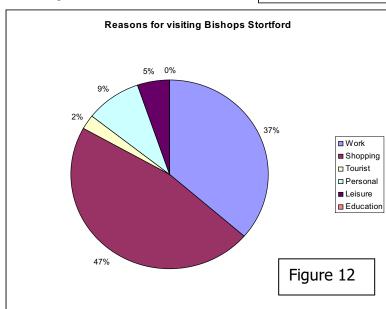
People visiting the area for 'personal' reasons are very similar in both instances but there are higher numbers of 'leisure', personal and 'tourist' visitors to Saffron Walden than to Bishops Stortford, which may mean it is a more attractive or lively place for people to visit, with higher 'leisure' outlets than the larger Bishops Stortford.

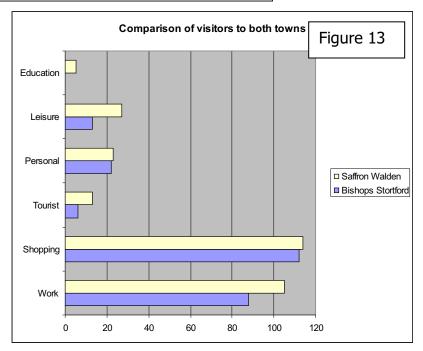
# Comparison

Figure 13shows a visual comparison between the numbers of visitors to both towns.

As mentioned before, the actual number of inhabitants of Saffron Walden is lower than Bishops Stortford but in all categories, ie, Shopping, Work, Education, Leisure, Personal and Tourist the numbers of visitors into the town are higher for Saffron Walden.







## Conclusion

My hypothesis is partially correct – 'The resident's needs 'are' met in 'some' of the settlements. The biggest settlements in the Uttlesford District; Saffron Walden, which occupies over 15,000 people and Bishop Stortford, that contains around 35,000 are both evenly spread. The variety of services that are in vast quantities in both small towns are essential to the residents, but are even more significant to the people in surrounding areas. Due to the fact that they can't maintain there own comparison services as their threshold population doesn't meet the demand. Highlighting the need of sufficient transport links.

In large economically developed settlements tourism is expected, which helps to support the economy, aiding expansion to the district and especially the settlement. Therefore, the needs aren't specifically met for the residents as tourist facilities are present which has no use for the locals. Points of interest are likely to attract tourists all the more so i.e. Bridge End Garden located in Saffron Walden.

In the Uttlesford District most of the needs in each settlement are similar. Although, the highly populated settlements contain more services of a higher order. Proving a problem, as, most of the settlements in the Uttlesford District have a population under 1,000 people. Furthermore, each age categories have different needs. Most necessary services, such as health, cannot be found in the smaller settlements so they're relying on the large towns for them, which is the same with leisure facilities. Moreover, the area of smaller settlements is considerably minute so less job vacancies will be accessible for the residents, showing the hypothesis is inaccurate.

The land use map in Saffron Walden indicates that the services aren't only for the residents. Several professional and personal services are not necessary for one small town. Emphasizing, the structure of the settlement is deliberately full of comparison services to support the rest of the district. The necessary needs, like convenience stores are defiantly met for the residents as there are more than enough in the town centre. Indicating the hypothesis, in this case, to be correct.

## **Evaluation**

The information I prepared helped me to understand various information about the Uttlesford District before the coursework was set; I never knew Saffron Walden, the place we visited, was actually in Essex!

I used additional information to contribute more evidence to achieve the hypothesis.

I think my detailed analysis in each technique I used was very reliable, and most certainly aided my theory. Although some of the cenus data was unreliable for most of the settlements which made my results insufficient. E.g – The data I collected on the population of Saffron Walden was different according to two different internet sources.

I had difficulty finding the population in the smaller settlements around Saffron Walden as little information like that isn't displayed on the internet. That's because the settlements are so small they can't be an entirety in their own right, they have to be in a parish; showing I had to 'roughly\*' estimate from the information given by the parish's population.

The questionnaires that we asked people whilst visiting Saffron Walden and Bishop Strortford was unreliable; I had the opinions from only twenty different people that of this scale isn't a fair test – I had to ask more people, but there wasn't enough time. Furthermore, we were in Saffron Walden for two weekdays, Wednesday and Thursday, so only adults were roaming the streets for us to ask making the test more un-fair and biased. Typically, the weather was also mild so that meant less people were at the shopping areas.

If we had more time, I would have been able to visit every settlement in my study making my answers more reliable.

Moreover, if we were given more time to complete the coursework I could of studied other small towns/large in England and maybe abroad as well, so my conclusion would be more dependable. I would have had time to justify more of my analysis and would have displayed more accurate information.

# **Bibliography**

A few of the internet sites I visited were;

http://www.upmystreet.com - Bar graph and settlement information

http://www.francisfrith.com - Maps of every settlement

http://www.saffronshops.com - A list of the shops in Saffron Walden

http://www.uttlesford.gov.uk/ - Information about the Uttlesford District

http://www.ukattraction.com - Saffron Walden golf course map and information

#### A book I used was

'Britannica 2007 Encyclopedia' – Factual information, including history