

# Distance Limits Travel Demand

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A great majority of international travel occurs within 1,000 kilometres of the source market's border claim the SHTM's Professor Bob McKercher, Assistant Professor Andrew Chan and Ms Celia Lam. Seeking to test the validity of the distance decay theory, or the expectation that "demand for any good or service should decline exponentially as distance increases", the researchers reason that all destinations close to source markets "should have an inherent advantage over more distant destinations". This has obvious implications for destination marketing, so they investigate its plausibility when individual origin-destination relationships are considered.

## Demand Decay

Put simply, distance decay is a way of explaining the "gravitational pull" of nearby destinations, but it has not received significant attention in recent years because more sophisticated methods of forecasting tourist flows have been developed. Yet destination choice, as the researchers remind their readers, "is a complex and often messy process", and there can be variation in the rate at which distance reduces demand. The relationship between each point of origin and possible destinations seems to have the most influence on the way demand changes as distance increases.

The researchers outline three broad ways in which distance causes demand to decay. The first is a relatively simple pattern in which demand peaks close to the traveller's point of origin and then decreases at an ever accelerating rate "as the perceived costs of travel distance and time increase". A second pattern involves travellers having only a limited number of destination choices along a linear route, so demand only decreases "after a certain threshold has been reached". The final pattern is similar to the first, with demand clustered close to the point of origin, but there is also a secondary peak caused by "very attractive" destinations at a greater distance.

## The Significance of Distance

Investigating outbound travel from 41 source markets to 146 destinations in 2002, the researchers drew on data sets

gathered by the United Nations World Tourism Organisation (UNWTO). All source markets that generated at least a million departures were considered, with almost 544 million arrivals registered in the destination markets, or 77.3% of the total yearly arrivals for all UNWTO member nations. Most source markets had land neighbours as their nearest destination, and of the 41 markets 17 were in Europe and 13 were in Asia. The median number of origin-destination pairs for each source market was 45, so these figures offered a comprehensive guide to movements between countries around the world.

Distances between source markets and destinations were categorised in 1,000 kilometre increments until 10,000 kilometres, then in 2,000 kilometre increments up to 14,000 kilometres and finally as "greater than 14,000 kilometres". Distances on the same continent were calculated between nearest borders, and distances between continents were calculated from country or region capital to capital. Using these measures, the researchers note that 57% of all travel is between land neighbours, and a further 25% occurs up to 1,000 kilometres away from the source market.

Destinations between 1,000 and 2,000 kilometres away remain "somewhat attractive" according to the researchers, with demand declining sharply thereafter. If the source market is close to an area that attracts no tourists – such as an ocean, an otherwise unpopulated area or a country with very different politics – travellers will extend the distance of their voyages, and this effect is even noticeable, though to a lesser extent, when the area is up to 3,000 kilometres away. At distances of 4,000 kilometres or more, destination markets with larger populations attract a relatively high proportion of travellers.

Two exceptions to this pattern are Japan and Australia, with Japan having one demand peak for short-haul travel within Asia and another for long-haul travel to the US, and Australia showing distinct peaks in travel to the South Pacific, Southeast Asia and Europe. Indeed, the patterns of

travel from all source markets with “island status” indicate that relative rather than absolute proximity could be a defining feature of access to destination markets.

### **Despite Variation, a Short-Haul Focus**

Given these variations in the way distance influences demand, the researchers suggest that distance decay is more a “generalisable concept” than a universal law. Destinations located more than 14,000 kilometres away from source markets, for instance, can sometimes attract up to 20% of the tourist flows from those markets. Spain and the United States are particularly strong in attracting long-haul travellers, the researchers observe. Nevertheless, there is an underlying emphasis on short-haul travel, which the tourism industry in general, and destination markets in particular, cannot afford to ignore.

This warning is particularly significant for destinations that are seeking to attract visitors from emerging source markets such as China, India and Russia. Regardless of how large these markets are, nearby destinations will attract a majority of their demand and those further away will compete for much smaller shares. Ultimately, write the researchers, “most destinations will receive greater returns on their marketing efforts and generate larger visitor numbers by focusing on nearby source markets and especially on immediate land neighbours”.

### **Points to Note:**

- Most international travel covers 1000 kilometres from the source market’s border or less.
- Demand for travel to a destination generally declines as the distance to it increases.
- That decline, however, can vary, especially for source markets near areas with no tourism activity.
- Promotional efforts should nevertheless focus on neighbouring source markets.

McKercher, Bob, Chan, Andrew and Lam, Celia (2008). The Impact of Distance on International Tourist Movements. *Journal of Travel Research*, Vol. 47, No. 2, pp. 208-224.