Tourism Congestion Management at Natural and Cultural Sites

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Tourism Congestion Management at Natural and Cultural Sites

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Call for this Handbook

Tourism resources belong to the common heritage of mankind. One of the consequences of the growth in world tourism has been that the wonders of the world have attracted huge numbers of visitors. These visitors arrive whenever they wish, causing at times delays and crowding at destinations and sites that spoil their experience. This may discourage people from making a return journey or recommending the trip to their friends and colleagues.

Congestion arising from excessively high levels of tourism activity has major implications for the tourism industry, host destinations and site managers.

- For the tourism industry, congestion results in operational inefficiencies, unhelpful competition for scarce resources, increazed business costs and loss of profits;
- For the responsible authorities in the host destination, congestion results in disruption to the local community, excessive pressure on infrastructure, reducing the welcome extended to visitors and adversely affecting local political support for tourism;
- For the managers of natural and cultural sites¹, congestion can adversely impact the long-term
 conservation of a site, negatively altering the biodiversity of a natural site or physical fabric and
 significance of a cultural site.

There are two questions that immediately arise:

- Can good planning and management enable more people to enjoy visiting natural and cultural sites of the world while protecting the long-term conservation of those sites?
- How should the upper limits to the numbers of visitors be established?

The private sector members of the World Tourism Organization (WTO) have reacted to these questions by encouraging WTO to prepare this *Handbook on Tourism Congestion Management at Natural and Cultural Sites*.

Tourism congestion is a complex issue as each stakeholder in the tourism process has different perceptions about it. Each has different motivations about the need to manage high levels of tourism activity and each has different roles to play in the management of that congestion.

This Handbook encourages all those in the tourism industry, as well as the managers of destination and sites, to work together in a cooperative manner to identify how congestion can be avoided or minimized at all points in the process involving tourism to natural and cultural sites throughout the world.

WTO Business Council

Department of Sustainable Development of Tourism, WTO

¹ See Appendix 2 for a description of the general features of the different types of natural and cultural sites.

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Who Should Use this Handbook

This Handbook is aimed at a variety of professional users, both within the tourism industry and for people who welcome and manage visitors to their destination or site, including also public tourism, cultural and natural authorities.

For the many different people in the **tourism industry** it provides recommendations for how they might positively contribute to the minimization of tourism congestion.

For **destination** and **site managers** it provides a range of recommendations for managers to build a well informed understanding of their places and their visitors, and provides recommendations for upgrading the operational and physical capacities of their areas to handle high levels of tourism activity to and from sites.

The Handbook has been written to provide very practical recommendations, using illustrations from the case studies. Some users will be familiar with many of the recommendations and will already have implemented some of them in their day-to-day activities. Others will find new information or suggestions that they can apply as appropriate to their circumstances.

How the Handbook is Structured

In Part A of the Handbook, Section 1 is dedicated to an integrated approach to managing tourism congestion at natural and cultural sites. In Section 2, the various categories and aspects of tourism congestion and their consequences are set out. In Section 3, the different stakeholders in the tourism process are described and in Section 4, the main calls for sustainable tourism development are stated together with an introduction to relevant tools and techniques for achieving sustainable tourism at natural and cultural sites by setting limits and managing tourism flows.

Part B of the Handbook describes the issues and recommendations to better manage tourism to avoid congestion at natural and cultural sites.

Part C of the Handbook contains a number of detailed case studies that illustrate some of the best practices for managing congestion at sites.

Part D of the Handbook contains recommendations for further reading material.

Part A Congestion at Natural and Cultural Sites

Introduction

1.1 The Need to Manage Tourism Congestion at Natural and Cultural Sites

This Handbook refers to "natural and cultural sites". Such sites should not be regarded as only those with major environmental or heritage status, such as World Heritage listing or major national recognition. The term applies to all forms of sites that are important natural and cultural attractions, and by extension, to all tourism destinations with a "special interest" that need to be protected. This description differentiates them from sites or places that are attractive to tourists primarily for their conventional recreational potential, such as beaches or skiing resorts.²

The dynamic and potentially destructive relationship between tourism and sites of natural or cultural heritage value is well known and has been the subject of much cooperation between the relevant parties.

The WTO Global Code of Ethics for Tourism ³ calls for tourism to work closely with others in the community to protect and preserve natural and cultural heritage resources to ensure a sustainable future for both the resources and for tourism. The World Commission on Protected Areas (WCPA), jointly with WTO and UNEP have produced Sustainable Tourism in Protected Areas: Guidelines for Planning and Management, which provides practical advice and suggestions for minimizing negative environmental impact on protected natural areas, ensuring that tourism works for the parks and also the local people living in them or nearby. The ICOMOS International Cultural Tourism Charter encourages the tourism industry to work closely with those who manage and conserve places of natural and cultural heritage significance.

This Handbook provides specific recommendations and guidelines to manage tourism flows. By gaining an understanding of the objectives and motivations of the various stakeholders in the process, all participants can more readily appreciate the need for more rigorous management and coordination to minimize the adverse effects arising from congestion. Achieving more consistent visitor flows will help host communities and tourism related businesses to better utilize and manage local resources and infrastructure. It will also provide more stable business and employment opportunities for the local people and help to minimize negative impacts on heritage values.

The majority of visitors move through a destination and its associated natural and cultural sites along relatively well-defined routes. Congestion occurs when physical obstructions block the natural flow or narrow passages cause the flow to slow down. Congestion can also occur when the flow, or the number of visitors, is excessive in relation to the capacity of the destination or site to accommodate that flow. Blockages need to be cleared quickly, diversions prepared in advance or extra capacity found to relieve the pressure of excessive volumes of people. If the flow is too strong or congested, there will be insufficient time to absorb the local context. A sustainable tourism industry depends on an effective management of tourism flows at and through destinations and sites, giving the visitor time and opportunity to appreciate and enjoy the local culture and the values of the places being visited and to acquire local goods and services.

The dynamic nature of visitor flows is a key factor in the management of congestion at natural and cultural sites.

² For other definitions of key terminology see Appendix 2.

³ See www.world-tourism.org/code_ethics/eng.html

1.2 An Integrated Approach to Congestion Management

An integrated approach to congestion management was developed by the World Tourism Organization (WTO) to create a framework for this handbook.

WTO wishes to make it clear that congestion of sites can not be solved by the site managers alone. First, the site managers need the active support of the public local authorities and other private sector services that provide the means and the infrastructure for getting to and from the site. Second, the site managers need the active support of the media and the tourism agencies and industry to influence demand for the site.

There are therefore aspects of destination management and demand management that site managers can influence to minimize congestion. The ICOMOS International Cultural Tourism Committee further developed this integrated approach during a workshop on the Greek island of Rhodes, in September 2003.

The key stakeholders who influence congestion at sites are identified and recommendations as to their roles, responsibilities and actions are made in Part B of the Handbook, which covers issues relating to site, destination and demand management. This mutual influence will not happen without organization, coordination and dialogue between the stakeholders.

What links all these stakeholders and activities together is the experience of the visitor. There are five stages in that experience, three of which are pertinent for congestion management of sites:

- The experience of choosing a destination and time to travel (Demand Management);
- The journey to the destination;
- The experience of the destination (Destination Management);
- The journey to the natural or cultural site;
- The experience of the site (Site Management).

Although congestion occurs elsewhere in the vacation journey, the three stages of demand, destination and site management of visitors are the focus for managing to minimize congestion at natural and cultural sites.

The integrated approach to congestion management

Management stages	The tourism experience	Key stakeholders
Demand management	 Decision to travel; Choice of destination; Timing and reason for travel; Group or individual travel; Choice of transport; Choice of accommodation; Choice of budget. 	 Tourism promotion and marketing agencies; Tourism guide publishers; Outbound/inbound tour operators; Travel agencies; Travel media; Heritage information media; Electronic media.
*	 Long distance journey to destination. 	 International and domestic transportation operators.
Destination management	 Arrival at the destination; Change to local transport; Local accommodation; Local orientation; Local service providers. 	 Local authorities; Infrastructure providers; Inbound tour operators; Local transport; Local tourism service providers; Local community.
	Journey to site.	Local transportation operators;Inbound tour operators;Tour guides.
Site management	 Site arrival and entry; Reception and orientation; Site visit; Facilities and retailing. 	 Site managers; Site planners; Entry and orientation staff; Security and hospitality staff; Tour guides; Retail and refreshment providers.
	Departure;Journey back to destination;Journey to another site.	Inbound tour operators;Local transportation operators;Tour guides.

Categories of Tourism Congestion at Natural and Cultural Sites and their Consequences

2.1 Permanent Congestion

Permanent congestion at a destination or site occurs when the place experiences large and continuing levels of visitation, in other words, continuous overcrowding.

Permanent congestion may require major upgrading of many aspects of the site, including access, parking, arrivals areas, entry and ticketing, public spaces and viewing areas, interpretation and visitor facilities, combined with a major upgrading of management, staff, information management and financial resources.

One of the clearest examples of an upgrading programme that responded to permanent congestion is the Louvre Museum in Paris. In the 1980s and 1990s, the use of this major complex was rationalized, expanded exhibition areas developed, the famous glass pyramid, designed by the Architect I.M. Pei, transformed the new entry court, extensive conservation work was undertaken on the historic building fabric, and a major new underground shopping and conference center was constructed.

2.2 Fluctuating Congestion

Fluctuating congestion occurs when there are well-marked periodical events, such as school vacations and public holidays, weekends, festivals, celebrations, ceremonies, cyclical events such as spring blossoms, summer sun, autumn leaves, snowfalls, annual animal migrations, or other factors that generate significant tourism or visitor activity within relatively short periods of the year. At some sites there may be considerable fluctuations in visitor pressures at various times of the week, particularly at weekends or during the day, such as at sunrise or sunset, or when daily rituals or ceremonies take place. Other congestion pressures emerge when a site is programmed within the morning or afternoon schedules of tour operators, or when pressures mount to catch up after periods of inclement weather.

This form of congestion requires additional staffing, transportation, security, food and beverage resources for relatively short periods. It is likely that these resources cannot or do not need to be sustained on a continuing basis, but are of critical importance to manage short-term visitor pressures. Where seasonal or other forms of fluctuation occur on a known and predictable cycle, when access is possible due to weather conditions, or at times of daily, weekly or annual events, destination and site managers can cooperate with the local tourism industry to provide the additional resources. Difficulties arise when unforeseen fluctuations arise and competition for available resources prevents an adequate response.

At times, special event days are necessitated by the demands of political or organizational leaders who expect heritage sites to achieve significant numbers of visitors. Site managers may be compelled to open their sites on national days. Such special events may place extreme visitor loads on sensitive areas, as they tend to attract many more people than the site would normally accommodate.

2.3 Physical Congestion at Destinations and Sites

Physical congestion refers to physical crowding, when "too many people" or vehicles, or both, are present in a defined place at one time.

Traffic congestion problems may occur at the entry points of destinations and sites that were not designed for large modern vehicles. Physical congestion can occur at natural and cultural sites if there are too many people at the site or in the most popular parts of the site. Arrival and parking areas are often crowded as visitors alight from transport, gather into groups or walk to and from the entry area. Ticketing, security checking areas and entry gates can become crowded. Within the site, visitors will stop to admire major attractions and special displays or listen to commentaries from their guides.

Certain places within a site, such as stairs, doorways and narrow passageways are more subject to physical crowding than larger spaces. Elsewhere visitors will spend lengthy periods making a choice about retail products, consuming food and beverages or using toilet facilities. Often, two-way traffic is encountered, as people struggle at combined entry and exits.

The importance of physical congestion is related not only to the numbers of people in a space at any one time, but to their behaviour while in the space. A crowd that is patient, quiet, respectful and interested will have less impact on those present or on the place itself, than if they are disturbed or threatened by excessive pushing and unruly behaviour. Congestion can also cause problems at crowded emergency exits during fire, security, earthquake provoked panic, theft, or other emergencies.

2.4 The Perception of Congestion at Sites

Visitor perceptions

For certain places, visitors have a clear vision of what to expect of the place. If it is a site of great natural beauty, or when watching wildlife in their natural habitat, they expect it to be empty. If it is inside a place of worship, they want to contemplate the place in a quiet manner.

Overcrowding can decrease the quality of visitors' experience. Evidence suggests that on busy days the amount of time a visitor spends inside a crowded house museum can fall by up to 60% compared to a quiet mid-week day.

Source: UK National Trust

Simple crowding at a destination or cultural site is not necessarily undesirable. People usually expect other people to be present, often in large numbers, at regular events such as market days, local festivals and religious ceremonies, and in places of public assembly such as plazas, squares and bazaars. Similar expectations apply to special events and performances, religious celebrations and secular festivals, outdoor performances and sporting events. At such times the presence of a crowd is perfectly acceptable and contribute to the enjoyment of the occasion.

The perception of congestion can also depend on the ethnic and socio-cultural background of the visitors.

Host destination perceptions

An issue is the relative proportion of visitors to local people or traditional custodians. In urban environments, whether small villages or large cities, visitors tend to enjoy seeing local people going about their daily lives, creating a vibrant social setting, into which the visitor can mingle and appreciate the contemporary lifestyle. However, the presence of relatively large numbers of tourists, especially those travelling in groups, can be regarded as undesirable by both the tourists themselves and by some of the local inhabitants, when they outnumber the local population, especially in small communities.

Local authorities that manage the destination infrastructure or services within the host community may perceive tourism congestion to be closely related to the level of physical activity, particularly on the local roads, in public spaces and with transportation systems. The perception of congestion can also relate to impacts on operational budgets, when the costs of managing congestion exceed any local capture of revenue from the tourism activity.

Local service providers may perceive congestion when it directly affects their particular location or service, causing inefficiencies or an inability to meet short-term demand. They may also perceive congestion when it is affecting areas of the local destination that are remote from their place of business and they appear to be missing out on customer activity.

Site manager perceptions

The perception of congestion for site managers may be similar to that of the visitor. If the nature of the site generates expectations of quiet contemplation, solitude and mystery the manager and staff will be, or should be, equally conscious of the impacts of crowds on those characteristics.

Site managers will also be concerned that congestion, particularly when it fluctuates over relatively short periods, place demands on the allocation of staff resources and on the site infrastructure. They will also be very aware of the potential damage, safety and security issues that can occur when large numbers of people are present on the site.

Tourism industry perceptions

The perception of congestion at sites for the tourism industry has several dimensions. They will be concerned as to whether the broad expectations of the visitor are being fulfilled as well as the difficulties and extra costs of managing too many visitors within a confined space. They will also be concerned that if a place is "full" then they will not be able to satisfy demand, leading to the question: Can better management and coordination solve some of the issues of congestion?

2.5 The Consequences of Congestion

Tourism congestion at destinations and particularly at natural and cultural sites can suffer from an accumulation of impacts, resulting in:

- A major reduction in the visitor's enjoyment and appreciation;
- Damage the flora, fauna, scenic values, physical fabric or special values of the place;
- Adverse impact on conservation or presentation programmes;
- Reduce opportunities for visitors to spend money locally;
- Generate considerable stress on the local community through competition for local services;
- Increase litter and pollution;
- Strain the capacity of local infrastructure; and/or
- Reduce the efficiency of tourism services.

Damage from tourism activities can occur incrementally, and over a considerable period of time. The rate of deterioration is likely to increase with excessive tourism pressures and physical congestion in restricted places.

Change and damage caused by tourism congestion can be irreversible. Sites with natural values sometimes have a potential to restore themselves if the damage is not excessive. Historic buildings, structures, human settlements and archaeological sites cannot be regenerated without significant intervention, and sometimes not at all.

Stakeholders in the Tourism Process

3.1 Categories of Travellers Visiting Natural and Cultural Sites

In this section, the different forms of travel that tourists use are explored, together with the attitudes or expectations that they might bring when they arrive at an individual site.

Visitors to a particular natural or cultural site do not always constitute a special or niche market. Most tourists mix a variety of activities and interests when they travel to new destinations or revisit favourite places. While many tourists travel for conventional recreation or to visit friends and relatives, the very act of travelling means that they experience the contemporary life style and society of the destination, as well as its traditions and distinctive features. All tourists mix the activities that they undertake on any typical day of their vacation.

While lesser-known or more difficult to access sites may attract a higher percentage of visitors who have made a special purpose journey, more well-known sites will also attract a large percentage of casual or curious visitors, all of whom can contribute to congestion.

International and domestic tourists

For the purpose of this Handbook, international tourists are defined as those who travel from another country, arrive at a destination, and then access those natural and cultural sites that can be visited from that destination. Domestic tourists are defined as those who reside in the same country as the sites they visit. They may stay overnight in the nearby destination or live close enough to the site to make a day visit. All will contribute to congestion in the local destination and Site.

A distinction needs to be made between those domestic tourists who travel large distances from their homes to visit the destination and those who comprise the local community. Those who travel from afar will require local transportation and accommodation while those who live locally, will regard the visit primarily as a conventional recreational experience. Local people will often visit a site outside peak periods, while some of those who live elsewhere might only be able to travel in peak vacation periods. International, domestic and local visitors will react differently to the site, posing quite different management challenges for minimizing the effects of congestion.

The World Heritage Site of Borobudur, in Indonesia, attracts over 100,000 foreign visitors per annum. In terms of congestion management, this figure cannot compare with the almost 2,500,000 Indonesians who come to the site in the same period.

Group and individual travel

The way that people choose to visit a site depends on many factors, including budget, age, their previous travel experiences or their membership of a group with shared interests.

Many people who make their first visit to a destination, particularly in unfamiliar countries, tend to travel in an organized group for the added safety, convenience or for companionship. Managing the congestion implications of group travel can be facilitated by direct cooperation between the destination or site managers and the tour operators and tour guides.

Many destinations and sites that are located within reasonable driving distance from major cities tend to attract high numbers of individual travellers, groups or families in self drive vehicles. Self-drive visitors can cause high levels of traffic congestion at those sites that are readily accessible by road transport, especially during long weekends and major seasonal holidays.

The categories of visitors to natural and cultural sites

For many, a specific visit to a natural or cultural site represents a secondary activity during their trip. It is usually unplanned and decided after their arrival in the destination.

Visitors who participate in nature based tourism, or eco-tourism, want to experience natural places and phenomena, typically through outdoor activities.

Visitors who participate in cultural tourism, traditionally focus on visits to museums and art galleries, attending artistic performances or other forms of cultural activities. However, in recent years, cultural tourism has come to be regarded as a much wider process of cultural exchange and absorption. It involves an awareness of the culture and cultural environments, including landscapes, archaeological sites, historical monuments and other artistic manifestations of the locality, as well as the values and lifestyles, visual and performing arts, crafts, languages, daily activities, traditions and leisure pursuits of the local population or host community.

It is helpful to categorize three groups of visitors to natural or cultural sites, as their needs are different:

- Those who just happen to be there, often as part of a larger vacation experience;
- Those who are genuinely interested in the site for its special attributes;
- Those with a strong emotional or expert connection to the site, which may be part of their own cultural heritage.

A single individual may fit into different categories at different times. Natural and cultural sites are likely to have all three categories of tourists at any one time, with the mix dependant on the nature of the place, the origin of the majority of the visitors and the quality of the information that generated their initial interest in making the visit.

3.2 Demand Management Stakeholders

These stakeholders are concerned with communicating with potential visitors.

It is relatively unusual for potential visitors to be made aware of information to encourage them to visit a site at particular times before they choose to travel – either through pricing incentives, timed tickets or indications of busy periods. The result of which is that people arrive, thinking that entry will be simple, only to find significant queues and crowds.

Tourism promotion and marketing agencies

Tourism promotion and marketing agencies are often part of National, Regional or Local Governments. Their primary function is to promote the destinations or sites within their particular jurisdiction in order to capture the greatest possible share of overall international and domestic tourism activity, to generate income and create jobs.

Usually, unique natural and cultural assets feature prominently in the branding that tourism promotion agencies generate for their destinations or sites. Promotional literature, with its positive focus, is designed to encourage visitation and promote consumption while in the region. With the very few targeted positive messages contained in tourism promotion it is not surprising that no reference to congestion is made. However, reference to websites for pricing and for information, before the decision is made to travel, should be possible.

Travel media and tourism guide publishers

Promotional media exercise a strong influence on potential travellers' perceptions and expectations of a place. They have an obligation to act in a responsible manner when discussing the tourism potential of destinations and site. As with tourism promotion agencies, it is not surprising that no reference to congestion is made.

However, tourism guide publishers are able to present a more balanced and detailed overview of the destination and nearby sites. Background scientific, historical or cultural information is usually provided as well as suggestions for appropriate behaviour. Many guidebooks already include travel advice about seasonal congestion or other tourism activity fluctuations, and their adverse implications for increased prices and more competition for accommodation, transport and food.

Natural and cultural heritage media

These tend to provide scientific, historical or cultural information about a place in an attractive, visual manner. They range from encyclopaedias, periodicals, books, specialist research reports, novels, documentary films, TV video, and web sites.

The motivation of such media is usually to be informative or educational about the values and characteristics of the place, its geography, flora, fauna, climate, host communities, cultural traditions and living cultures. Comparisons and linkages are often made with similar places. Conservation and management issues are often a key aspect of the educational literature. However it rarely deals with the interaction between tourists and destinations or sites.

Outbound tour operators

Outbound tour operators arrange facilities for tourists to travel abroad, packaging the trips, overseeing the creation of itineraries, selecting and contracting with inbound tour operators in the host countries, arranging for airline tickets, and handling travel and liability insurance. Large tour operators often own their own airlines and inbound tour operations.

Outbound tour operators adjust their prices and generate business activity to exploit seasonal fluctuations or to respond to special events or festivals. They often determine the particular sites that will be visited from a particular destination, as well as the timing, sequence and duration of the visits. The influence they exert on the tourism and holiday decisions of potential travellers places a particular responsibility on outbound tour operators to cooperate with destination and site managers to manage tourism congestion.

Travel agencies

Travel agencies provide advice and offer options for potential travellers, as well as making travel reservations for individual or group travel.

Some travel agencies are members of major international or national business organizations, others operate independently. All have links with large and small tourism operators and the transportation providers that will take their customers to the destination. Travel agencies operate on commission or fees. A well-informed travel agent may advise on times to avoid congestion. All will be responsive to requests to make the necessary arrangements once the travel decision has been taken.

Internet (site and destination managers)

A growing number of travellers to natural and cultural sites are moving towards the Internet for arranging their trips and making their reservations, bypassing travel agencies. This places responsibility on those destinations and sites to create independent websites to include information about seasonal congestion, pricing and timed ticketing.

3.3 Journey to the Destination

International and national transportation providers

International and national transportation companies include airlines, shipping lines, rail companies, bus companies, and hire car companies.

They are primarily interested in achieving profitable operations in a competitive marketplace. All have a role in managing congestion at destinations and can contribute to the management of congestion at sites. They have a role to play in working with outbound and inbound tour operators and destination managers to ease fluctuating demand and to coordinate their arrival and departure schedules with the capacity of the local infrastructure to accommodate them.

3.4 Destination Management Stakeholders

Destination managers

Destination managers play a key role in the management of the flow of visitors into and away from the destination and in the quality of their experiences when they arrive. The ease of access to and from associated sites is also largely dependent on the quality of infrastructure, particularly local roads, signage, public transportation management, the flow of traffic in peak periods and parking supervision.

Destination managers coordinate the provision of a wide range of infrastructure and services, including airports, seaports, railway systems and road networks, policing and security, traffic management, power, water, sewerage, waste disposal and communication utilities.

Destination managers influence the local planning that governs where and how development takes place, including all forms of development associated with the provision of tourism infrastructure, education and employment programmes and the detailed application of environmental and heritage protection laws. They have to be responsive to the requirements of the local community and the benefits that the community expect to gain from tourism and assist in minimizing negative impacts of tourists on the local community and the destination in general.

Local tourism offices

These are often operated by the local government authority and provide local information, travel advice, accommodation and reservation services to visitors.

Local tourism offices play an important role in directing visitors already in the destination to nearby sites and attractions. They have the advantage of local knowledge and up-to-date information about tourism fluctuations and the specific conditions at nearby sites. Local tourism offices can recommend times of the day or week that might be less crowded at particular sites, as well as providing pricing and timed ticket information. They can also act as facilitators to assist local tourism operators to coordinate their resources with forthcoming promotional events.

Inbound tour operators

Inbound tour operators are mainly private sector businesses or government supported enterprises.

Smaller outbound operators usually subcontract inbound operators in host countries to meet arriving travellers; provide local transportation and to arrange accommodation, visits to specific sites, and speciality activities. Inbound tour operators are often responsible for bringing the majority of visitors to natural and cultural sites.

Seasonal fluctuations in business activity have a major influence in the way that tourism operators plan and organize their resources. Excessive congestion at destinations or sites can significantly reduce operational efficiencies, impacting on profitability.

Commercial operators have an important part to play in helping visitors to use, appreciate and enjoy the site. In cooperation with the site manager, well run commercial tours and other activities can help to manage visitor flow in heritage sites, to minimize congestion and to enhance the visitor experience.

Local tourism service suppliers

Local tourism service suppliers include hotels and those who provide other forms of tourist accommodation, retailers who sell general tourism merchandise, suppliers who cater for specialized needs such as shelter, protective clothing and other equipment (often on a rental basis), book stores, photographic and souvenir suppliers, and food service outlets such as restaurants and cafes aimed primarily at visitors.

Local tourism service suppliers often establish their outlets as close as possible to the paths taken by tourists at natural and cultural sites thus creating congestion. Such suppliers often trade only at times of high seasonal tourism activity.

The host community

Many natural and cultural sites are highly valued by the local community who are often keen to present their sites to visitors or to exploit them as tourism resources in the expectation of economic gain. Local people can become resentful or antagonistic, particularly if they themselves do not benefit from tourism or if they feel that their private space is being invaded during peak seasons.

The quality of a tourism experience will be enhanced if the local community welcomes the visitors and participates in the benefits that tourism can bring. For the other stakeholders it can be difficult to identify who represents the legitimate voice of the majority of local people. It is clearly in the interests of all the stakeholders to understand and respect the concerns and interests of local communities.

3.5 Journey to the Site

Local transportation providers

Local transportation providers include bus companies, and car hire companies, ferry or launch operators, charter flight operators, light rail, bicycles, boats, rafts and kayaks and even hire of local animals such as horses, camels and donkeys, or specialist services for trekkers and backpackers. Public transport can be an important part of this service provision.

They are primarily interested in achieving profitable operations in a competitive local marketplace. All have a role in the detailed management of traffic congestion. Uncontrolled or poorly coordinated scheduling can lead to excessive traffic pressure on local roads, footpaths or at site entries. Many local transport providers have contractual arrangements with local tourism operators to provide a packaged service for visitors. They sometimes work in a cooperative manner with their local colleagues to share work and income in an equitable manner. Close coordination with local authority traffic management is an important feature of congestion management.

3.6 Natural and Cultural Site Management Stakeholders

Site managers and traditional custodians

The majority of natural and cultural sites are managed primarily to protect and conserve the particular scientific, scenic, historical or cultural values that make them distinctive. There is usually some form of statutory protection for the place, or a heritage management framework that defines principles and guidelines for its management. Indigenous and traditional custodians have cultural obligations based on customary law, which influence their management obligations.

Public access and presentation of its significance to the visitor are often central components of site management. The way that the place is described and the information conveyed to visitors is as important as the control or planning techniques used to manage visitors while they are on site.

Some site managers or management agencies are responsible for large numbers of sites across a region or country, or even internationally. These can include national parks agencies, religious institutions, national departments of defence, land management, transportation or communication, and non-government organizations (e.g. the National Trust in the United Kingdom and Parks Canada).

Site managers are responsible for a range of activities and for the staff or contractors who deliver those services. These can include promotion managers, pricing/ticketing and information technology, site planners and designers, traffic and parking managers, entry and orientation personnel, visitor managers, guides and interpreters, security and hospitality staff, park rangers and custodians. All of these service providers need to be carefully trained and coordinated to ensure that they contribute to managing appropriately the congestion that can arise from excessive visitor pressure on site.

The key decisions relative to congestion at the sites usually reside with the site manager or their managing agency e.g.:

- 1) Number of visitors that can be contained within the site at any one time;
- 2) Pricing decisions, timed ticketing;
- 3) Timed parking and charges for coaches.

Local tour guides

Local tour guides are significant stakeholders in congestion management. They are often responsible for guiding a large percentage of visitors, especially those who arrive in groups, through the site. Tour guides can be associated with outbound and inbound tour operators, or can operate on an independent basis. Many natural and cultural sites directly employ guides and interpreters, providing a useful source of local employment and an opportunity to share local, traditional or specialized knowledge of the place.

Tour guides are often under pressure to meet tightly organized schedules and to deliver a quality visitor experience within competitive pricing structures. Tour guides are usually knowledgeable about the physical, natural, historical and cultural heritage values of the place. They can be less skilled in the process of guiding their groups around sites in a way that avoids congestion or the annoyances that arise when too many groups are competing for limited space, shelter or facilities.

Retail and refreshment providers

Many natural and cultural sites incorporate retail and refreshment services as part of the attraction for visitors and as a source of income for the site.

Problems occur where local vendors and their stalls crowd the entry or its access pathways if informal vendors seriously disrupt the movement of visitors. Extreme disruption of movement or excessive personal pressure on visitors by aggressive vendors, as they compete for attention, can degrade the visitor experience.

Sustainable Tourism Development of Natural and Cultural Sites

4.1 Sustainable Tourism Development

The current WTO conceptual definition of sustainable tourism is as follows:

"Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic and sociocultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability.

Thus, sustainable tourism should:

- 1 Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural resources and biodiversity;
- 2 Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance:
- 3 Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation.

Sustainable tourism development requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus building. Achieving sustainable tourism is a continuous process and it requires constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary.

Sustainable tourism should also maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues and promoting sustainable tourism practices among them."

4.2 Guidelines for Sustainable Tourism in Natural Areas

The World Commission on Protected Areas (WCPA) of the IUCN (World Conservation Union), jointly with WTO and UNEP, have produced *Sustainable Tourism in Protected Areas: Guidelines for Planning and Management*, which provides practical advice and suggestions for minimizing negative environmental impact on protected natural areas, ensuring that tourism works for the parks and for the local people living in them or nearby.

Also useful is the *European Charter for Sustainable Tourism in Protected Areas*, developed in 2000 with the support of the European Commission and the EUROPARC Federation by the Parcs Naturels Régionaux de France. (www.parcs-naturels-regionaux.tm.fr)

A parallel initiative of the Worldwide Fund for Nature (WWF), the PAN (Protected Areas Network) Parks Programme began in 1997, with the objective of introducing a marriage between nature conservation and tourism on a European scale (www.panparks.org)

The *Quebec Declaration on Ecotourism* (Ecotourism World Summit, Québec, 2002) is another useful source of guidelines and recommendations.

(http://www.world-tourism.org/sustainable/IYE/quebec/anglais/declaration.html)

The International Ecotourism Society produced *International Ecolodge Guidelines* in 2002, a document that incorporates the latest research and techniques available in the field of eco-lodges and other nature-based accommodations and facilities.

4.3 WTO Global Code of Ethics for Tourism

The WTO Global Code Of Ethics For Tourism (1997) includes two articles that are of relevance to this Handbook:

Article 3. Tourism, a factor of sustainable development

- 1 All the stakeholders in tourism development should safeguard the natural environment with a view to achieving sound, continuous and sustainable economic growth geared to satisfying equitably the needs and aspirations of present and future generations;
- 2 All forms of tourism development that are conducive to saving rare and precious resources, in particular water and energy, as well as avoiding so far as possible waste production, should be given priority and encouraged by national, regional and local public authorities;
- 3 The staggering in time and space of tourist and visitor flows, particularly those resulting from paid leave and school holidays, and a more even distribution of holidays should be sought so as to reduce the pressure of tourism activity on the environment and enhance its beneficial impact on the tourism industry and the local economy;
- 4 Tourism infrastructure should be designed and tourism activities programmed in such a way as to protect the natural heritage compozed of ecosystems and biodiversity and to preserve endangered species of wildlife; the stakeholders in tourism development, and especially professionals, should agree to the imposition of limitations or constraints on their activities when these are exercised in particularly sensitive areas: desert, polar or high mountain regions, coastal areas, tropical forests or wetlands, propitious to the creation of nature reserves or protected areas;
- 5 Nature tourism and ecotourism are recognized as being particularly conducive to enriching and enhancing the standing of tourism, provided they respect the natural heritage and local populations and are in keeping with the carrying capacity of the sites.

Article 4. Tourism, a user of the cultural heritage of mankind and contributor to its enhancement

- 1 Tourism resources belong to the common heritage of mankind; the communities in whose territories they are situated have particular rights and obligations to them;
- 2 Tourism policies and activities should be conducted with respect for the artistic, archaeological and cultural heritage, which they should protect and pass on to future generations; particular care should be devoted to preserving and upgrading monuments, shrines and museums as well as archaeological and historic sites which must be widely open to tourist visits; encouragement should be given to public access to privately-owned cultural

- property and monuments, with respect for the rights of their owners, as well as to religious buildings, without prejudice to normal needs of worship;
- 3 Financial resources derived from visits to cultural sites and monuments should, at least in part, be used for the upkeep, safeguard, development and embellishment of this heritage;
- 4 Tourism activity should be planned in such a way as to allow traditional cultural products, crafts and folklore to survive and flourish, rather than causing them to degenerate and become standardized.

4.4 ICOMOS International Charter for Cultural Tourism

The ICOMOS International Charter for Cultural Tourism provides an umbrella statement of principles that should guide the dynamic relationships between tourism and places or collections of heritage significance.

The *Charter* (http://www.international.icomos.org/charters/tourism_e.htm) addresses the primary relationships between the cultural identity and cultural heritage of the host community and the interests, expectations and behaviour of visitors, both domestic and international. It promotes the engagement of the host community, including indigenous and traditional custodians in all aspects of planning and managing for tourism, particularly at heritage sites, within cultural landscapes and in historic towns.

The Charter promotes several major concepts of relevance to the management of congestion.

- 1 That one of the major reasons for undertaking any form of conservation is to make the significance of the place accessible to visitors and the host community, in a well managed manner;
- 2 That both the conservation community and the tourism industry must work cooperatively together to protect and present the world's cultural and natural heritage, given their mutual respect for it and their concern for the fragility of the resource;
- 3 Tourism should bring benefits to the host community and be planned to avoid adverse impacts on the authenticity and physical expression of the cultural heritage. Poorly managed or excessive tourism can have negative effects on the local community and their places of cultural significance.

4.5 WTO Indicators for Sustainable Tourism Development

The new WTO Indicators of Sustainable Development for Tourism Destinations: A Guidebook, 2004, stems from the work of the last decade on clarification of the key issues in sustainability for tourism and the means by which indicators can support better decisions and actions. The development and use of indicators is increasingly viewed as a fundamental part of overall destination and site planning and management, and an integral element in efforts to promote sustainable development for the tourism sector. Tourism sector decision-makers need to know the links between tourism, tourist activities and the natural and cultural environments. The guidebook contains a wide range of samples of indicators for various issues that are relevant to congestion management at destinations and sites: e.g. conserving built heritage, transport to/from destinations, urban tourism, parks and protected areas, natural and sensitive ecological sites, visitor experience quality, access for disabled people, etc. (see Appendix 4 and 5 for sample).

The development and use of indicators represents a way of transforming data into strategic management intelligence. The WTO guidebook on indicators contains a procedure for the identification of indicators, sample indicators and references for a wide range of sustainability issues.

4.6 Visitor Impact Management Techniques

A number of management techniques or tools have emerged in recent decades to enable site managers to determine the upper limit of visitors to avoid unacceptable impact on the natural and cultural values of the site. These techniques and tools are designed to help guarantee sustainable tourism development of the site.

a. Tourism carrying capacity

Tourism carrying capacity seeks to identify the maximum level of visitor use and related infrastructure that an area can absorb before the values of the place are diminished to an unacceptable degree. Tourism carrying capacity has a dimension that includes the management of the visitor satisfaction in relation to visitor numbers at that place.

However, the practical application of traditional measurement methods of carrying capacity proved limited, because when applied to tourism a simple definition of carrying capacity involving the identification of a single threshold value will be inadequate in nearly all cases.

b. "Limits of Acceptable Change"

Limits of Acceptable Change (LAC) concentrate on the concept of "How much change is acceptable". It focuses on resource management by objective, and can be applied to environmental, cultural, physical, economic, social and psychological aspects of a site or locality.

The main strength of the LAC approach is that the final product is a strategic and tactical plan for a specific area based on defined limits of acceptable change for each recreation opportunity class, with indicators of change that can be used to monitor ecological and social conditions.

c. Other visitor management models

Other models such as "Visitor Experience and Resource Protection Process", "Tourism Optimization Management Model", "Visitor Impact Assessment" and "Visitor Impact Model", have been developed by academics working in the field. Most follow a logical process:

- 1. Determine the goals and objectives of both management and stakeholders;
- 2. Formulate a set of performance indicators based on the goals and objectives;
- 3. Develop a plan of implementation;
- 4. Implement the plan;
- 5. Monitor the site to determine if these standards are being met;
- 6. Mitigate problems if the standards are not being met.

A variety of planning techniques is evident within the General Management Plan for Grand Canyon National Park, including: visioning, management by objectives, sustainable development, carrying capacity, ecosystem retention, cultural landscape studies, interpretive planning, analysis of visitor use patterns, visitor experience evaluation and visitor orientation feedback.

Grand Canyon National Park is currently in the process of developing and implementing major, innovative transportation improvement initiatives. An interagency project team is being established to assist the park with these efforts. The team's focus includes developing and analysing performance specifications and cost estimates for a light rail and alternative-fuel bus transportation system; developing a regional transportation system; and researching ITS and other technological applications for use in the park.

At the Hol Chan Marine Reserve, in Belize, Central America, in response to the negative impacts of tourism on marine life, the Reserve Managers have conducted a carrying capacity study, with the help of Green Reef Environmental Institute and the World Wildlife Fund Mesoamerican Project. The purpose of the project was to study tourist visitation in the reserve and implement adaptive management strategies to address and mitigate these impacts in order to conserve the marine natural resources.

4.7 Pricing and Timed Tickets

There has been an understandable reluctance to introduce prices for revenue purposes and for managing demand, because of disparities in personal income and the desire for universal access to natural and cultural sites.

However, gradually, pricing has been introduced and timed tickets are now commonplace at special exhibitions. Pricing is now seen as a way of generating revenues for both managing the sites and for providing for proper and appropriate guardianship and protection of the sites.

Pricing and timed ticketing are thus tools of sustainable tourism development.

We know that people respond to economic incentives relating to entry charges to sites. (However according to research carried out for the US National Parks Services the charges can be much higher than first supposed). Prices need to be set at a level at which potential visitors do respond. Variable prices are useful for several reasons:

- It spreads demand;
- It reflects supply and demand patterns;
- It can be used for reasons of social equity;
- It helps to reduce congestion;
- It can be used for different needs (e.g. normal visit/ extended visit/ expert visit).

It should be noted that outbound tour operators, airlines, hoteliers, other accommodation suppliers and ground transportation all use variable pricing to spread demand and to maximize the economic use of tourism resources.

The advantages of imposing a limited number of timed tickets is that it is a powerful tool for controlling numbers:

- It spreads demand;
- It eradicates congestion (if arrival schedules are planned);
- It provides information on predictable numbers of visitors and for planning staffing levels.

The disadvantage of pricing is the lack of access for those that cannot afford to visit. This can be countered by:

- Special prices for children/students/retirees;
- Special prices for others at periods of low demand.

4.8 Queuing Management 4

There is substantial literature available on queues and queuing theory. Queues are susceptible to complex statistical and mathematical techniques that enable managers to design systems and procedures for managing queues.

Without entering into the mathematics, it is possible to use some of the concepts of queuing to analyze the situation and to develop useful solutions.

The calling population represents the potential total number of visitors wanting to visit in any one day or other period. Theoretically, the number could be infinite. However, what managers at sites can consider is a way of establishing a recognizable and manageable calling population that arrives at regular intervals throughout the day.

The methods available are:

- Establishing a maximum total calling population for the day;
- Provide information to consumers/operators about booking and pricing;
- Introduce variable pricing and limited numbers of timed ticketing as appropriate;
- Arrange for an entertaining arrivals area to divert people from just waiting their turn.
- 2 Establish the queuing time (e.g. for issue of tickets) that is reasonable for customers to have to wait. Current queuing times can be measured (e.g. 1 minute):
 - a) By timing the last to arrive (at the tail of the queue) and how long it takes to be issued with a ticket;
 - b) The average wait time can then be established.
- 3 Customers arrive at different times. Sometimes in large batches (e.g. from coaches) or individually. Understanding the time between the arrival of customers leads to consideration of the service time for each customer (e.g. how long does it take to process an individual ticket?) From this information a visual check on acceptable length of the queue is then feasible.
- From this data the queue discipline needs to be established, that is to say the criteria for selecting customers. Usually customers are selected on a First Come First Served (FCFS) basis. However, with the arrival of large batches (on coaches) there is a case for prior purchase of tickets via the Internet or through tour operators.
- Establish the number of ticket booths required to maintain the queuing wait time standard as well as examining ways for reducing the time to process tickets.
 - This approach can be used not just for ticketing purposes, but also for entry to the site, for security checks, retail stores, food and restaurant facilities and so on.

Part B The Issues and Recommendations on How to Manage Tourism Better to Avoid Congestion at Natural and Cultural Sites

Managing Tourism Congestion at Natural and Cultural Sites

5.1 Introduction to Site Visitor Management at Cultural and Natural Sites

This section is devoted to the aspects of site management relating to managing congestion. The key stakeholders are identified. Then, there are charts, mapping out the visitor experience and ways of minimizing congestion. This is followed by checklist questions to assist in the analysis of the operational and physical influences on site visitor management.

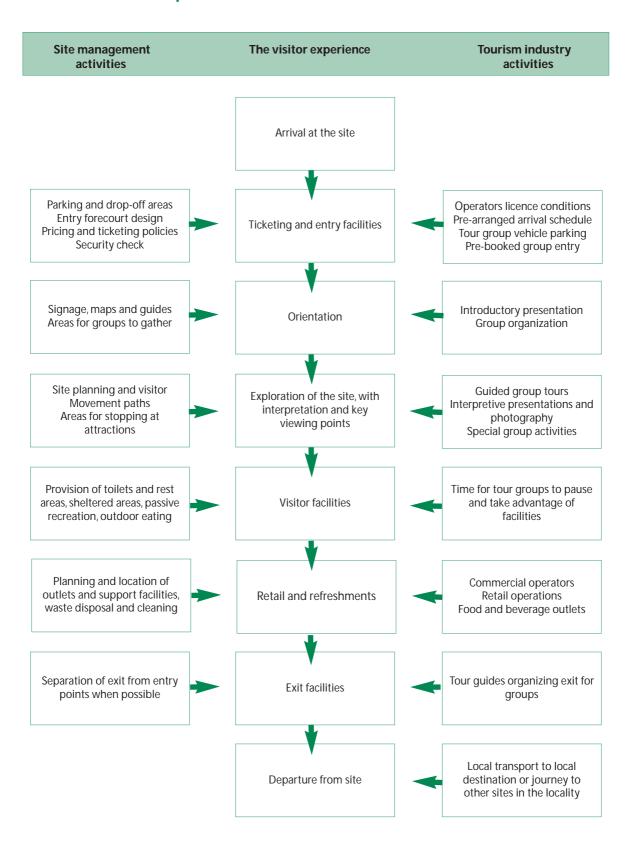
The main focus of this section is on the significant issues that have been identified and the recommendations on how to resolve them.

5.1.1 Key Stakeholders

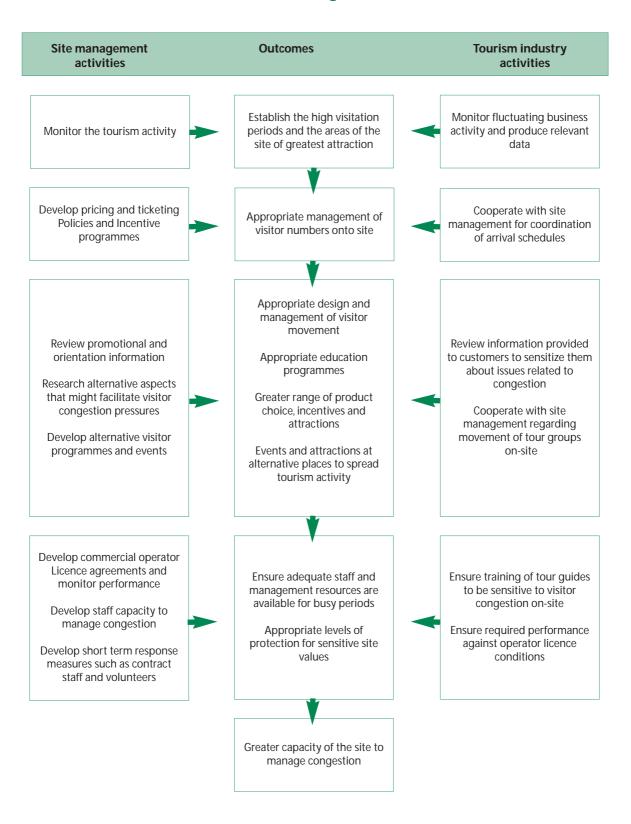
The Key Stakeholders involved in site management related to tourism congestion are:

- Site managers and traditional custodians;
- Site promotion managers;
- Site planners and design managers;
- Site entry managers;
- Site conservation and presentation managers;
- Incoming tour operators;
- Local transportation companies;
- Local tour guides;
- Retail and refreshment providers;
- Site maintenance and security managers.

5.1.2 The Visitor Experience at Natural and Cultural Sites



5.1.3 Chart of Activities to Minimize Congestion at Sites



5.2 Analysis of the Influences on Site Visitor Management

Every natural or cultural site is unique, and the way that visitors arrive at and move around the site will be governed by those unique characteristics. Site managers and their staff need to monitor carefully the way that visitors interact with the site, especially at peak periods.

Managers need to work in collaboration with commercial and other external operators who are involved in the tourism activities at the site.

Many natural and cultural sites collect visitor data for marketing purposes. Congested sites need to collect information about daily, weekly or annual fluctuations and peak periods of visitor activity, in a regular and systematic manner. This information needs to be analyzed in the wider context of nearby sites and destinations.

5.2.1 Operational Influences on Site Visitor Management

Key influence on site management	Checklist questions
Major source markets	 Are the major source tourism markets international or domestic? Are there seasonal fluctuations in the level of visitor arrivals? Are they predictable? Is the level of tourism increasing or decreasing over time? Why?
Current administrative responsibility	 Who within the site management organization has responsibility for managing tourism flows? Are they adequately resourced and do they have sufficient organizational support?
Current consultation responsibility	Is there regular consultation between site management and tourism industry stakeholders to minimize tourism congestion?
Efficiency of general tourism management	 Are the majority of tour group arrivals organized by a well defined group of operators? Do most arriving groups keep to a regular and previously agreed schedule?
Efficiency of the site entry	 Is the site entry area efficiently managed and working smoothly in peak periods? Can visitors enter the site without excessive delays or congestion, especially in peak periods?
Efficiency of visitor movement on site	 What are the main routes taken by visitors as they move around the site? Where do visitors congregate as they move around the site? Are these major viewing locations, at food and retail outlets or visitor facilities? Are guides used to minimize rather than create congestion?
Effectiveness of site interpretation	 Are visual displays and audiovisual facilities planned to ensure the quality of interpretation while at the same time ensuring a smooth flow of visitors?
Efficiency of visitor services and facilities	Are the visitor services and facilities adequate for the demand?

5.2.2 Physical Influences on Site Management

Key influence on site management	Checklist questions
Physical capacity of site access and arrivals	 Is there congestion in the arrivals precinct, including parking areas and the site entry in busy periods? Are there adequate parking areas and overflow capacity for busy periods?
Physical capacity of site entry precinct	Is there congestion in the entry precinct at peak period?
Physical nature of on-site access	 What are the major points of interest to visitors? Are the movement paths around the site well and efficiently designed and constructed to facilitate a smooth flow of visitors?
Physical nature of visitor services and facilities	 Are there sufficient visitors facilities located around the site to cater for busy periods?
Physical capacity of site departures	Is there congestion in the departure areas?

5.3 Improve Operational Congestion Responses of the Site

5.3.1 Establish Administrative Responsibility for Congestion Management

The issue

The responsibility for managing tourism congestion at natural and cultural sites is sometimes unclear.

- Ensure that a senior staff member has been made responsible for coordination of all operational and physical planning to improve congestion management;
- Ensure that the individual identified has sufficient qualified staff and financial resources to manage congestion properly;
- Ensure that all proposals to improve congestion management are reviewed by the site manager;
- Ensure, if necessary, that special operational systems are implemented to manage tourism activity
 at peak periods. These procedures should be in addition to those normally used in less busy
 periods.

5.3.2 Establish Consultative Mechanisms for Tourism Congestion Issues

The issue

Although it is in the direct interest of all tourism stakeholders to cooperate in the implementation of measures to manage and control tourism flows and thus minimize congestion on sites, very often consultative mechanisms for managing tourism congestion issues do not exist.

Recommended actions

- Ensure that a tourism management consultative group, that includes all relevant stakeholders and tourism industry representatives, is regularly convened;
- Ensure that these consultations recognize that some congestion issues may only be resolved by achieving a balance between competing interests and expectations;
- Ensure that regular discussions take place with individual stakeholders about specific congestion issues.

At Canterbury Cathedral, in the United Kingdom, which receives 2.3 million visitors per annum, a complete review was undertaken of the way the site was presented to visitors. All signs and notices were brought into a disciplined system of those which are directional, those which are informative and those which are just labels. A fundamental principle applied to this review was the reduction of signs to an absolute minimum and their content to as few words as possible, on the understanding that the place for extended information was in the guide-books and not on notices - most of which were so crammed with words and information as to defy anyone's proper attention. The review was supported by staff training and the introduction of measures to guide visitors in a friendly manner along well-defined routes, avoiding a sense of control, while they appreciated the points of interest.

5.3.3 Introduce a Comprehensive Communications Policy

The issue

Over time the signs, brochures, guides and other information produced for a site can become confusing, visually complex, poorly coordinated or contradictory. This can reduce the visitor's appreciation and enjoyment of the site.

- Review all current introductory, information and directional signs, notices, interpretation material, brochures, websites etc. to identify outdated or redundant or unnecessary material;
- Introduce a comprehensive communications policy for the site as a whole and all its features and activities;
- Work with intermediaries to ensure that the right messages reach the end consumer, especially relating to pricing/timed ticketing and busy periods;
- Remove any signage that is confusing or contradictory;
- Reduce redundant and interpretative signage to a minimum and ensure that it is clear and concise;
- Introduce brochures and guidebooks to reduce the amount of fixed interpretative material around the site;
- Ensure that every guidebook, leaflet, children's work-book, and publication is consistent with the communications policy.

5.3.4 Improve Responsive Measures for Peak Periods

The issue

Tourism congestion usually fluctuates across the year or during any typical day. Most sites cannot permanently sustain staffing and other management resources to match peak demand, although they should ensure that additional resources and overflow facilities are available when required.

Recommended actions

- Ensure that there is adequate data available to predict seasonal or more frequent fluctuations in visitor arrivals;
- Ensure that additional staff and other resources, including overflow facilities are available to cater for peak periods;
- Ensure that there is adequate monitoring of peak period activity to identify any issues that require additional responses;
- Ensure that contingency plans are available for the few periods when tourism activity is well in excess of normal peaks.

In Sydney, almost 1 million people crowd onto the many headlands, parks and city streets around the Harbour every year to watch the spectacular summer evening fire works display on New Year's Eve. Over many years the local authorities have developed a well coordinated action plan to manage special public transport timetables, restrict traffic and parking, licence food and beverage vendors, ensure adequate public toilets, provide firm but friendly policing to manage crowd behaviour and clean up services the next morning. Sydneysiders expect such effective management and have maintained their popular support for this major community festival.

5.3.5 Develop Tourism Operator Licences

The issue

Many sites have a variety of commercial or community operators who offer tours, scenic flights, arts and crafts, refreshments and souvenir sales, interpretation programmes, cultural centres and performances, commercial filming, photography and special events. These operators are often not subject to specific regulation and can cause congestion at sites.

- Consider introducing an operators licence system to govern the activities of all operators. Licence
 conditions should include means of access, group size, paths of travel, frequency of entry, modes
 of transportation, restricted access to certain areas or at certain times, site safety, and protection
 of the special values of the site;
- Ensure that the licence system is appropriate to the needs of various categories of operators and
 has been developed in consultation with industry representatives. Limitations may be required on
 the number of operators permitted on site at any one time;
- Ensure that licences conditions are in accordance with the plan of management and contain protocols to monitor operator performance;
- Ensure that licences can be withdrawn if performance standards are not met. The licences need to be regularly renewed;

- Ensure that there is a licence system for operators who congregate outside the site entry or in the immediate vicinity. This system may be developed in conjunction with the local authorities and operator representatives;
- Consider methods of communicating to visitors who are licensed operators.

At the Hol Chan Marine Reserve, in Belize, Central America, general measures regarding commercial operators include requirements for all tour guides to be duly certified. Tour guides receive annual training stressing the importance of not stirring sediments and kicking corals. Cruise boat owners must show that their guides have completed the guide course

The Great Barrier Reef Marine Park and World Heritage Area Management Authority in Northern Australia has "capped" certain tourism activities through limits to the number of permits issued and through bookings systems. The caps on permits only apply to tourism operations and not to recreational users, however the setting provisions apply to all users.

At the Kornati National Park in Croatia, site managers, travel agencies and tour operators work together to encapsulate the peace and quiet for the tourist as a key selling point and conserve the balance of nature by preventing overcrowding. The rules and regulations of the National Park are adhered to. The management of the park - an archipelago of numerous islands - is a mixture of public/ private initiatives. The park service collects mooring fees to reduce the risk of real overcrowding by pleasure yachts of all kinds in the summer.

5.3.6 Include Congestion Issues in the Management Plan

The issue

Many publicly owned sites are required to prepare a management plan under their legislative framework, but are not often explicitly required to include the management of congestion.

Recommended actions

- Ensure that a site management plan has been prepared, in accordance with legislative and administrative requirements, to guide and control all conservation, tourism and management activities:
- Ensure that the site management plan has established an approximate upper limit of visitor numbers that can reasonably be on site at any one time, or within a day/year etc. without degrading its special features;
- Ensure that the site management plan includes operational practices to spread demand both spatially and temporally and to manage and minimize tourism congestion. The plan needs to include support for the use of additional resources and staffing in peak periods, if these cannot be eradicated.

The majority of Antarctic heritage sites now have management plans that place restrictions on the number of ships that can arrive at a single time.

At the Arches National Park in the US a Visitor Experience and Resource Protection (VERP) Plan presents management zones that describe the desired resource and social conditions for different parts of the park and identifies indicators and standards for each of the zones. It further identifies management actions where the standards are reached or exceeded.

5.3.7 Improve Coordination of Arriving Groups

The issue

Excessive or uncoordinated arrivals within short time frames cause congestion.

Recommended actions

- Coordinate the arrivals schedules of those tour operators who regularly bring groups to the site.
 This will require arrival and departure times to be allocated. Unexpected or uncoordinated group arrivals will be required to wait until there is a break in existing schedules;
- Where road access is restricted ensure coordination between tour group arrivals and local public transport schedules to minimize congestion;
- Ensure that information on access conditions and restrictions is readily available to local tour operators, transportation companies and self drive visitors;
- Ensure there is good directional signage for arriving traffic, with adequate information about parking areas and restrictions;
- Ensure that traffic movement is well controlled within the site arrivals area, including parking restrictions on narrow roads;
- Ensure that shuttle bus services are available in peak periods to bring visitors from remotely located overflow parking areas;
- Ensure that the parking officers are available to control traffic and collect parking fees.

At Canterbury Cathedral ad hoc groups arriving in busy periods with no pre-booked entry slot might find themselves having to wait until it was convenient to receive them.

When the main entrance to Yellowstone National Park, in the United States becomes clogged electronic signs direct visitors to other entrances.

5.3.8 Introduce Different Options for Site Entry

The issue

Peak operational periods need to be eradicated. Are measures available to manage the flow of people into the site, or encourage visitors to arrive at less congested periods?

- Introduce variable entry fees to manage the flow of visitors by introducing cheaper entry prices and incentive packages at non-peak times, or higher entry prices for peak periods;
- Introduce a range of entry prices or incentive packages in peak periods that permit visitors to only access specific sections of the site;
- Introduce additional entry prices for special events, temporary exhibitions or demonstrations, special interest activities or to special areas of the site that offer an enhanced or self-contained experience;
- Introduce timed tickets that are only valid for particular time slots to control the flow of visitors into the site and the maximum number of visitors on the site.

In 2003 the Louvre in Paris replaced their previous ticketing policy with reduced prices in the afternoons to encourage local people and individual travellers to enter the museum at times when there are less groups arriving. This was later abandoned when the Government introduced free entry for young people. Sissinghurst Castle Gardens, in the UK offers a third ticket for free, if visitors come after 4pm. The Palace of Versailles in France lowers entry prices after 3:30pm. The Alhambra in Granada offers visitors short or long tour packages to regulate the flow of visitors to the most sensitive buildings on the site.

The introduction of entry charges to a number of English cathedrals in the 1990s was, in part an attempt to manage visitor congestion. As places of worship, entry was free for those who wanted to take part in the formal religious services. At such times entry to the remainder of the cathedral may also be restricted to facilitate worship.

Notre Dame in Paris is one of many cathedrals that charges those who want to climb the towers as a separate visit to the main sanctuary.

An increase in the entry fee at the Keoladeo Ghana National Park in India, in 1997, resulted in an 11% decrease in visitor numbers while revenue more than doubled, as a result of an increase in the percentage of foreign visitors.

5.3.9 Improve Site Entry Management

The issue

Site entry is often congested.

Recommended actions

- Choose the appropriate ticketing system appropriate for the circumstances of the site;
- Introduce optional multiple entry tickets for those who wish to visit the site over a number of consecutive days without queuing to purchase tickets for a second or third time;
- To avoid the need for visitors to return to the ticket office, introduce a combined ticket system or
 "passport" that permits entry to all those sections or activities within the site that have separate or
 individual entry charges;
- Introduce pre-reservation systems for groups or individuals, including internet, pre-purchase and telephone reservations. Cooperate with ticketing and travel outlets in major population centres, and the nearby destination for pre-purchase ticket sales;
- Set entry prices in rounded currency amounts to avoid the need to issue small change. Ensure that family and group entry prices are also in rounded amounts;
- Where credit cards are accepted establish clearly signposted separate ticketing queues or free standing ticket issuing machines in the entry area.

Introduce illustrations on having different points of sales like Versailles and Alhambra (e.g. using banks).

The Getty Centre in Los Angeles has a timed entry system for the public car park. Patrons who wish to arrive by car must reserve the slot in advance.

Park authorities of Angkor World Heritage Site, in Cambodia, offer a multiple entry pass to reduce congestion at the ticket sales area. A three-day pass for US\$40 and a one-week pass for US\$60, are comparatively cheaper than a one-day pass of US\$20.

Many art galleries and museums in Italy and elsewhere have time specific entry conditions imposed. An entry ticket will only be valid for entry within a specified and relatively short period. The number of tickets sold per period is strictly controlled.

At Schonbrunn Palace and Gardens in Vienna ticket sales are related to the established carrying capacity of the interiors of the palace. Ticket sales at the site entry are coordinated with prebooked tickets, which have reserved entry times, to enable casual visitors to fill available spaces within the established limit of entry numbers per hour. Visitors who are waiting for their reserved entry time are free to visit the gardens. Group entries are only allowed by advanced reservation.

In St. Mark's Cathedral in Venice, the entry turnstyle is coordinated with the exit turnstyle to control the numbers of visitors inside the building at peak times.

5.3.10 Improve Tour Guide Management on Site

The issue

Tour guides often cause congestion and inconvenience to others by giving long and loud explanations to static groups of visitors at major points of interest.

- Cooperate with tour guide operators to develop and introduce a commercial licence system that includes operational standards that will encourage the minimization of congestion on site;
- Develop a scheduling system to coordinate the arrival times of tour groups;
- Prevent tour group leaders from giving lengthy commentaries when standing close to the major points of attraction within the site. Commentaries should be given before or after the group arrives or enters at the major points of interest;
- Prevent tour group leaders from giving loud commentaries when in close earshot of other tour groups or gatherings of individual visitors;
- Ensure that local tour operators provide adequate congestion management awareness and training to group leaders as part of their preparation and accreditation;
- Introduce the compulsory use of audio equipment by guides for any groups of more than 5 people
 in these circumstances all entry prices should include the use of audio equipment even for
 individual visitors;
- Ensure whenever feasible that tour guides are required to give explanations outside the major point of interest;
- Consider introducing audio systems for certain areas of the site with guides excluded. (There are both advantages and disadvantages of excluding guides from certain areas).

The advantages are:

- Individuals can visit the site at their own pace;
- There is less interruption to the general flow of visitors;
- Virtual silence is assured on the site;
- Less time is spent per visitor/visit.

The disadvantages are:

- Audio systems can suffer malfunctions;
- Guides feel excluded, and possibly that their livelihood is threatened;
- Guides cannot give feedback to specific questions raised by visitors while actually on the site.

5.3.11 Control the Numbers of Visitors in Certain Areas

The issue

Many sites contain sensitive areas where access for visitors should be restricted. Sensitive values could include seasonal factors, breeding times for fauna, rare or historic building elements, or the need to respect the privacy rights of local residents or traditional owners.

- Establish a plan that identifies the maximum number of people that will be allowed into those areas of the site that have been identified as being particularly sensitive or fragile;
- Identify those areas of the site that can accommodate large numbers of people without damaging sensitive values. Direct overflow crowds to these more resilient areas in peak periods;
- Develop different itineraries or walking routes through the site to distribute and control the flow of visitors. Temporarily close routes if sections of the site need to recover;
- Minimize the number of people who are likely to venture into sensitive areas by locating car parks
 and other visitor facilities well away from these areas, restricting the width or layout of walking
 paths and night lighting, banning the use of special access equipment or introducing special
 design features and advisory signage;
- Close selected areas of a site to general visitor traffic during busy periods. For historic towns or villages, introduce resident parking permits and controlled access conditions for tourist coaches or vehicles;
- Restrict the movement of visitors around large sites by requiring them to use special vehicles in preference to their own coaches or cars;
- Restrict access to certain areas except by guided tour;
- Introduce ticketing options for different categories of visitors.

The Palace and Domain of Versailles outside Paris, which attracts over 7 million visitors each year has developed a number of different itineraries or pedestrian routes to distribute visitors to different parts of the site. Some itineraries have special themes related to special aspects of the place. Audio guides encourage the visitors to move on guickly from each point of interest.

In the Galapagos Islands different zones of ecological sensitivity are rigidly enforced. Fixed itineraries are set for tourist boats. Careful monitoring identifies if excessive pressure in being experienced by sensitive places within the site.

The Point Pelee National Park in Canada has developed a comprehensive pedestrian circulation plan to stop the proliferation of informal trails through the park. The defined trails introduce visitors to points of interest and attractions. The trails are opened or closed on a seasonal basis to allow regrowth and keep visitors away from sensitive areas.

The important Islamic city of Kairouan in Tunisia has introduced a well-marked itinerary through the historic sections of the old town, complemented by a single access ticket for all of the monuments. This encourages the majority of visitors to take the main route and avoid disrupting the privacy and lifestyles of the residents elsewhere in the old centre. In addition the mosque is closed to non-Muslims during the afternoons.

The Alhambra in Granada has introduced strict limitations on the numbers of visitors permitted within the main historic palaces at any one time. Visitors are offered a range of itineraries that introduce the majority of the site, but control numbers within the sensitive areas.

5.3.12 Manage the Movement of Visitors in Sensitive Areas

The issue

Most sites have sensitive features or areas with limited physical access. At peak periods, or times of sensitivity in relation to the values of the site, it may be necessary to restrict access or exclude visitors completely.

- Introduce tour programmes to manage the movement of visitors into sensitive areas. Carefully
 control the numbers of visitors in each tour group and the frequency of their departure;
- Prevent visitor access into sensitive areas if necessary during busy periods;
- Ensure that appropriately designed walkways allow visitors to move through sensitive areas in a controlled manner;
- Increase the number of staff during busy periods to ensure that visitors move around the site as
 efficiently as possible;
- Encourage visitors in sensitive areas to remain silent and respect the ambience of the place;
- Restrict access to sensitive areas, including places of worship, at times when the presence of large numbers of people will degrade the special ambience of the place;
- Ensure that tour group leaders avoid giving commentaries in sensitive areas where crowding should be minimized.

Acoma Pueblo, a village in New Mexico is managed by the Acoma Indian Nation. They decide how many people per day will be allowed on the guided tours of their traditional village. They conduct all the tours and write the material they use on the tours, controlling the way that their history and cultural are interpreted. They will not answer questions they feel are invasive or would require them to divulge information that may be sensitive to their religious practices.

The former manor of the Danish author, Karen Blixen has been restored, with the park turned into a bird sanctuary. Part of the building has been refurbished with a permanent exhibition about her life and there is a café and a shop. Admission to the private sections of the house takes place only in groups on guided tours at fixed hours. Other visitors can enjoy the cafe, go to the park or spend the time in other parts of the house museum.

At the historic Cape Byron Lighthouse, located on the most easterly point of the Australian mainland, the Cape Byron Trust offers guided interpretive tours to the general public that access the narrow confines of the lighthouse tower. These have proved extremely popular, and are a good example of managing visitors within a highly restricted place.

Both Canterbury Cathedral in the UK and Santiago de Compostela in Spain, found that by enforcing silence in the crypt, visitors tended to stay for less time and show greater respect for the quiet atmosphere.

In Canterbury Cathedral less draconian decongestion measures were found to be more effective than more intrusive actions. Visitor management is based on the principle of *winning them over* rather than *pushing them around*.

Visitors to the Ho Chi Minh Mausoleum in Hanoi are reminded by signs and disciplined honour guards of the need for dignity and decorum.

5.3.13 Manage Crowds

The issue

There are unique circumstances that can transform the behaviour of a group of people when they are in a crowded situation or waiting in long queues. Crowding can cause people who are otherwise peaceful and respectful to adopt behaviour that is thoughtless and aggressive, building pressure from the weight of numbers involved. Such pressures can be felt at the entry areas of sites, when several coach loads of visitors arrive simultaneously, or when large numbers of people are gathered for a special occasion or depart from an event in a short period of time.

Emergency situations also cause major problems with crowd behaviour. Fire emergencies, earthquake activity, terrorism or violence can cause sudden crises at congested exits.

Recommendations

- Site managers need to understand how individuals and crowds react and behave in the space available at places of public assembly, providing a safety focus for designing and managing such spaces. They need to understand how crowds move, what factors prompt their movement, what prevents or hinders desirable movement, what allows, encourages or facilitates appropriate movement and what controls inappropriate movement;
- Crowd management processes should include these precepts:
 - 1 Guide the management of crowd flow and movement in a range of public assembly venues;
 - 2 Apply risk assessment techniques to crowd management;
 - 3 Use crowd simulation tools in designing, planning and managing assembly venues.

- If crowd management techniques are likely to adversely impact on the important values of the
 destination or site, consideration should be given to relocating the proposed event to another, less
 sensitive venue, or reducing the numbers of people permitted to take part;
- There are a number of associations that provide assistance with crowd management techniques.
 Many of the lessons and experiences have been derived from major entertainment venues and sporting events, but can be usefully applied to crowd management at tourist sites. Examples of useful web sites include:
 - International Association of Assembly Managers (www.iaam.org)
 - European Association of Event Centres (www.ewc.org)
 - World Council for Venue Management (www.venue.org)
 - Venue Management Association (Asia & Pacific) Ltd (www.vma.org.au)
 - Crowdsafe (www.crowdsafe.com)

5.3.14 Introduce Special Modes of Travel on Site

The issue

Private cars or coaches entering certain sites can damage the scenic values of the site.

Recommended actions

- Undertake feasibility studies for the introduction of special sightseeing vehicles on the site;
- If financially sustainable and appropriate, purchase or lease suitable vehicles, or arrange commercial licences for the provision of such vehicles;
- Introduce a policy, as appropriate, that prevents sightseeing access for private vehicles, especially
 to sensitive areas of the site.

Visitors, who do not wish to hike through the mountain scenery in Yosemite National Park, in the United States and the Ordesa Canyon in the Spanish Pyrenees are required to transfer from private vehicle into light trains or navettes that ply a scheduled service. Schedules can be varied in response to fluctuating visitor loads.

The Zion Canyon National Park Development Concept Plan in the US establishes a shuttle bus (open tram) system within the park during the peak visitor season from March to October.

Park and ride schemes work well in the many historic towns in the United Kingdom, (York, Bury St Edmunds and Norwich) and in Bruges, Belgium, where visitors are transferred in from parking areas away from sensitive historic quarters.

5.3.15 Control Aerial Tours over Large Scale Sites

The issue

Excessive use of aerial tours can damage the scenic or conservation values of the site.

Recommended actions

 Ensure that all aerial tourism and commercial photography over the site is strictly controlled by an operator licence system. Operators must obtain prior approval before there are any departures from agreed conditions;

- Ensure that there are appropriate restrictions within the licence agreements on hours of operation
 and flight paths to respect the wishes of any traditional communities within the site or to protect
 the ambience of major visitor viewing places;
- Ensure that operators are required to conform to established flight paths, minimum altitudes, maximum number of aircraft over the site and restricted periods of operation.

The management plan for the huge World Heritage Site of Uluru-Kata Tjuta, in central Australia, has established a Fly Neighbourly Agreement to control scenic flights over the park. These form part of the operators licence for any commercial flights over the site, including general aviation, commercial aerial photography and scenic flights.

5.4 Improve the Physical Capacity of the Site

5.4.1 Improve Site Access, Arrivals and Departure Area

The issue

Lack of informative directional signage both to the site and in parking areas can cause confusion among drivers approaching the site, adding to congestion.

The efficiency and convenience of parking areas are an important part of managing high levels of tourism activity. Heavy congestion at the entry degrades the visitor experience and impacts adversely on the general presentation of the site.

- Encourage local authorities to erect clear directional signage to the site on primary access routes;
- Ensure that directional signage near the site indicates any separately designated parking and dropoff areas for coaches and cars. Separate, where possible parking areas for coaches and cars;
- Ensure that approach routes and traffic movement in parking areas are adequately sized, well
 designed and clearly signposted. Road design and construction must not have an adverse impact
 on the setting and presentation of the site;
- Ensure that parking area capacity indicators are installed to advise arriving vehicles in busy periods;
- Ensure that maps and dossiers are readily available for those coach drivers who are less familiar with the site and its approaches;
- Ensure that overflow parking areas and temporary or alternative access arrangements are available in peak periods.

At Abu Simbel, in Egypt, where the daily influx of 2,000 tourists was causing traffic jams, management implemented a one-way road system.

At Portofino on the Italian Riviera, traffic police limit the number of vehicles travelling along the single, narrow coastal approach road well before they reach the historic port and boating resort. Parking stations are located at the rear of the village, ensuring that cars do not disrupt the pedestrian areas around the port.

In peak seasons at Lindos, on the Greek island of Rhodes, tourist buses are confined to the large parking areas above the village. Visitors then either walk down the hill or catch a local mini-bus service.

At the Palace and Domain of Versailles near Paris, the previous seven entrances have been reduced to two, one for groups and one for individual visitors.

5.4.2 Improve the Entry Precinct

The issue

Entry points are a frequent source of congestion, particularly when relatively large groups of visitors arrive together. Major events held at the site can also generate large crowds, well in excess of the normal patterns. Visitors need space to pause and consider their options for entry, to re-group into parties when travelling together, or to rest if the site entry has been reached after a long walk or steep climb.

Visitors without pre-purchased tickets need time to read pricing information and decide if they want to enter the site. Congestion, even among small numbers of visitors, can occur when entry prices are only displayed next to the ticket window. Visitors who are unfamiliar with the local currency need additional time.

- Ensure that the site entry forecourt is large enough for visitors to orient themselves, decide to enter the site, rest after a substantial journey or congregate into groups for joint entry;
- Ensure that the entry forecourt is capable of processing visitors efficiently in busy periods;
- Ensure that there is adequate shade and shelter and site information in the forecourt;
- Ensure that there is concise signage in the entry forecourt for visitors to understand the pricing and entry conditions, including family, group and concession pricing, before they arrive at the ticket counters;
- If required, introduce separate ticket counters for domestic and international visitors;
- Ensure that there are adequate barriers and handrails to progressively direct crowds to the ticketing windows;
- Separate site entry ticket counters from retail areas;
- Ensure that ticket checking and security screening areas are well planned to minimize waiting times for visitors;
- Ensure that there is sufficient space inside the site entry for visitors to pause, re-assemble and absorb orientation information or to listen to an introductory commentary, without blocking the flow of visitors;
- Ensure that adequate orientation signage, maps and brochures are located close to the site entry.

At the World Heritage Sites of Hue, in Vietnam and Borobudur, in Indonesia, there are different ticket selling and site entry points for domestic and international visitors, who pay different entry prices.

5.4.3 Improve Visitor Movement Patterns around Site

The issue

Newly arrived visitors need to quickly familiarize themselves with the layout of the site and accessing its primary attractions. Groups and tour parties need space to gather and possibly receive an introductory commentary.

On many sites the comfort of visitors can be affected by seasonal weather; very hot sun, strong winds or heavy rain. Inadequate areas of shelter can cause tour groups to crowd together, disrupting each other with different commentaries.

Recommended actions

- Ensure that the site has clearly identified entry locations, with display maps or plans to inform visitors of the layout of the place and their current location relative to major points of interest;
- Ensure that visitor movement patterns are continuous or in a one way circulation system, to avoid returning visitors competing with those walking or climbing to the attraction;
- Ensure that there is directional signage and barriers, or defined walkways, to control the movement of visitors, especially in busy periods;
- Ensure that additional, overflow movement pathways are available for use in peak periods;
- Consider limiting visitors to riding in special purpose vehicles in order to access remote or difficult
 areas of the site;
- Ensure that the site is regularly monitored, especially in peak periods, to confirm that the movement pathways are working efficiently;
- Ensure that there are adequate and appropriate areas of shelter, with seating, against inclement weather distributed around the site;
- Ensure that sheltered areas can cater for tour groups while minimizing any disruption from competing commentaries by the tour leaders;
- Ensure that additional temporary shelter is available in peak periods or very bad weather.

In the World Heritage listed city of Rhodes, in Greece, visitors can enter the city through a number of gateways and move freely around the historic precinct. Regularly spaced directional maps enable visitors to orient themselves in relation to the main points of attraction.

5.4.4 Minimize Difficult Access Routes

The issue

Access by foot in many natural and cultural sites can be challenging or involve a degree of danger. Such areas will cause visitors to slow down and potentially disrupt the flow of people.

Recommended actions

- Ensure that appropriate provision has been made in movement paths for the mobility impaired, elderly and young;
- Ensure that there are areas for rest and recuperation available after long climbs or exciting parts
 of the site:
- Ensure that there is appropriate equipment available for visitors if required;
- Ensure that the effects of perceived danger have been minimized by the installation of adequate handrails or barriers:
- Redesign pathways with difficult access to avoid people slowing down or trying to turn back against the flow of oncoming visitors;
- Ensure that there is adequate information about the degree of difficulty of steep or narrow pathways;
- In peak periods, discourage visitors from accessing difficult pathways or sections of the site if it is apparent that they are unlikely to finish the journey with ease.

The spectacular 18km Samaria Gorge walk on Crete is a very popular attraction but has a considerable degree of difficulty for tourists who may not be sufficiently fit or properly equipped. Once commenced, there are no alternative exits. A middle aged French couple, suffering from exhaustion at the end, said that they would not have attempted the walk if they had known of the level of difficulty. Many visitors purchase their tickets at least one day in advance in the nearby town of Chania. There is little information available at the points of sale to advise of the degree of physical difficulty about the hiking through the Gorge.

5.4.5 Improve Access for the Physically Impaired

The issue

Visitors who are mobility impaired or elderly should have reasonable and equitable access to as much of the site as possible, consistent with the need to protect sensitive heritage values. Slow movement by the disabled or elderly can cause localized congestion, annoyance and embarrassment. Several countries have legal requirements for equitable access. The design and installation of access ways, lifts, ramps and handrails can pose significant design challenges in relation to the natural, aesthetic or cultural values of the site.

- Undertake a detailed review of the site to identify any areas or pathways where access for the mobility impaired may be difficult;
- Where appropriate, upgrade existing pathways or install special access that enables easy and equitable movement without causing embarrassment or disrupting the flow of other visitors;
- Install adequate signs warning if certain routes are difficult for the mobility impaired;
- Ensure that specially installed routes or equipment are well designed to minimize adverse impacts on the sensitive values of the site.

5.4.6 Improve Visitor Movement Past Viewing Locations

The issue

Most natural and cultural sites have special attractions where visitors congregate, disrupting the flow of people and potentially causing congestion. Many sites install extensive interpretative signage or informative material at such locations. The time taken by visitors to read and absorb the information will slow down their movement beyond the viewing point.

Recommended actions

- Ensure that adequate space is provided near major points of interest so that the flow of visitors can readily bypass those who have stopped to admire the attraction, or listen to a brief explanatory commentary from a group leader;
- In open, scenic landscapes, ensure that signposted areas are available for motorists to pause without disrupting the flow of traffic;
- Ensure that major site interpretation material is moved away from the immediate site entry
 precinct to minimize congestion among arriving visitors;
- Ensure that major interpretation material is located to avoid disrupting the flow of people when others stop to read the information;
- Ensure that interpretive information is distributed around the site or provided in a portable format for the visitor to carry;
- Ensure that interpretation material is not located directly within the viewing places of major points
 of interest if this will increase visitor congestion;
- Provide ample areas for interpretation at visitor centres placed at points that do not disturb the flow of visitors.

In Canterbury Cathedral, interpretation panels were removed from major viewing locations to reduce the disruption to the flow of visitors through the place. Visitors are provided with the information in a portable format for them to read as they move around.

In the Louvre, the famous "Mona Lisa" has been moved into an end gallery, where visitors can congregate without disrupting the regular flow of other people. Barriers have been installed in the approach galleries to guide the flow of visitors in each direction.

The UK National Trust is considering the development of dispersed, smaller visitor centres and multiple entries points to large natural sites to avoid a bottle-neck at one central location. This approach has already been implemented in sites in South Africa, Chile, Spain, and elsewhere.

The narrow confines of the First World War battlefield at ANZAC Cove on the Gallipoli Peninsula in north-western Turkey attract tens of thousands of Australians, New Zealanders and Turks, among others, to the annual dawn commemoration service on 25th April each year. Extensive new landscape design works and interpretation panels have been integrated with a ramp path system. Low walls modulate the space, forming resting points during informal visitation and focal elements for the dawn service.

5.4.7 Minimize Disruption from Retail and Food Outlets

The issue

Localized congestion at retail or food outlets and visitor amenities can occur during busy periods. Such places can be a major source of income for the site or ensure that the visitor is able to enjoy the site or extend the duration of their stay.

Recommended actions

- Locate the main retail outlet near the entrance with direct external entry, but ensure that visitors
 entering and leaving congested sites can move easily past food and retail outlets without being
 forced to walk through them;
- Offer the opportunity for visitors who do not want to visit the site to enter the main retail outlet without passing through the entry gates;
- Ensure that food and retail outlets are located and have sufficient space around them for people
 to gather without disrupting the flow of visitors as they move around the site;
- Distribute outlets around the site to spread the flow of visitors, but not near the main attractions where crowds will gather;
- Locate picnic areas near pathways for easy access and not on steep terrain or in highly visible locations near the main site attractions;
- Ensure that the internal layout of retail areas is designed to efficiently handle large numbers of visitors;
- Ensure that there are on-going discussions with lessees of visitor services facilities to minimize visitor congestion in and around food and retail outlets;
- Ensure that lease agreements require the provision of adequate staff resources in food and retail
 outlets at peak periods to ensure that customers are served quickly and efficiently;
- Ensure that food and retail outlets do not receive deliveries during peak periods.

In the Louvre, there are small café areas distributed around the museum to enable visitors to take a rest break without needing to move back to the main entry or food services areas.

The Louvre also has small retail outlets located at the entry/exit of special exhibitions in the main galleries. This enables visitors to purchase literature and souvenirs rather than wait or crowd into the main retailing areas of the museum.

5.4.8 Improve Visitor Facilities and Facilities Management

The issue

Maintenance and security requirements and practices can cause disruption to the normal flow of visitor movement around sites, particularly if main pathways are blocked for lengthy periods.

- Ensure that all maintenance practices facilitate the smooth flow of visitors;
- Walkways, tracks and paths should be kept in good condition, with lighting handrails, steps and ramps well maintained;

- Ensure that directional and information signage is well maintained;
- Ensure that emergency evacuation routes, equipment and places of assembly are well marked and maintained;
- Distribute visitor amenities well around the site in a carefully planned manner to ease congestion at the site entry;
- Ensure that visitor toilet areas are well maintained and fully functioning in busy periods;
- Ensure that visitor health and safety procedures are fully operational in peak periods;
- Ensure that pedestrian movement paths are well maintained and safe at all times;
- Ensure that site maintenance and site security programmes do not disturb the flow of visitors at peak periods;
- Ensure that adequate numbers of site security staff are available in peak periods;
- Ensure that emergency evacuation procedures are fully operational at all times.

Managing Tourism Congestion at Destinations

An area of cooperation between tourism operators and destination managers is the management of tourism activities within the locality to minimize the negative effects of congestion on the physical, operational and local community values of the place.

6.1 Destination Management and Coordination of Visitors to Natural and Cultural Sites

Management usually refers to the managing of a single entity. However, destination management is used as a term that comprises the coordination of the decisions and powers of implementation of various entities.

The focus here is on the aspects of destination management and coordination that impact on visitation and congestion at natural and cultural sites only.

The destination managers that are required to coordinate, are the central stakeholders in the efficient management of tourism congestion at destinations and at associated sites. Destination managers are sometimes the responsible public authority, such as a local government, often comprising a number of departments or agencies, but can be public/private destination management organizations as well. There may also be added involvement from other levels of government.

Most destinations experience fluctuations in the numbers of visitors at various times of the year. Management resources and physical infrastructure to cater for the peak loads usually cannot be sustained in quieter times, but are essential in busy periods. Destination managers need to understand the likely fluctuations and manage their resource allocations accordingly.

Key stakeholders

The key stakeholders involved in destination management related to tourism congestion are:

- Local authorities and those responsible for Infrastructure;
- Outbound tour operators;
- Transportation companies;
- Incoming tour operators;
- Local tourism service suppliers;
- Host community.

6.1.1 The Visitor Experience of Destinations

Public agency activities	The visitor experience	Tourism industry activities
	Arrival at the destination	
	•	
Generalized promotional information about the destination	Initial orientation and welcome	Product and service advertising by local tourism operators
	V	
Tourist office with accommodation reservation service, maps and literature	Transfer to local transportation	Package group collection Self drive, taxis, public transport
Local authority planning controls and visitor data collection	Arrival at local accommodation	Local hotel and other accommodation operators friends and family
Signage, maps and literature General local authority services and responsibilities Local community Traffic and parking police	Orientation and exploration of destination	Local tour operators Taxis and self drive Local transport Friends and family Local retail and food services
Road and other infrastructure Signage and route prioritization Traffic and parking police	Local transport to nearby Natural or cultural site	Local Tour operators Taxis and self drive Local transport Friends and family
	Visit local sites	
	Travel to other sites in the vicinity of the destination, to other destinations or return home	

6.2 Analysis of the Influences on Destination Management

Destination managers need to monitor carefully the numbers and flow of visitors to identify fluctuations and the periods when peak activity takes place. In examining and reviewing tourism influences managers need to collaborate with all those stakeholders who are involved in tourism activities in the locality.

The data needs to be integrated into regional or wider contexts, to monitor the flow of visitors on route to the destination.

6.2.1 Operational Influences on Destination Management

Key influence on destination management	Checklist questions
Major source markets	 Are the major source tourism markets international or domestic? Are there seasonal fluctuations in the level of tourism activity? Are they predictable? Is the level of tourism increasing or decreasing over time? Why?
Current administrative responsibility	 Which agencies within the political and administrative structures within the destination have responsibility for managing tourism activity and tourism infrastructure? Are these agencies adequately resourced and do they have sufficient political support?
Current consultation responsibility	 Is there regular consultation between public officials and tourism industry stakeholders to minimize tourism congestion?
Efficiency of entry points	 Do most tourists arrive by air, sea, rail or coach or self-drive vehicle? Do the major entry points operate efficiently at times of peak activity? Are there immigration, entry or customs formalities or procedures that can be simplified? Are there appropriate tourism information and reservation services available?
Operational efficiency of transport interchanges	 Can arriving visitors efficiently transfer to local transport when needed? Is there adequate directional signage and information available for arriving visitors?
Efficiency of local traffic management	Does the local traffic management system respond adequately in times of peak activity?
Efficiency of peak activity management	Are there adequate procedures to manage large crowds at major events?
Tourism Impact on local community	 Is there local community support for tourism, especially during peak periods?

6.2.2 Physical Influences on Destination Management

Ket influence on destination management	Checklist questions
Physical capacity of local road system	 Is the local road system – including parking areas - capable of servicing peak tourism demand? Is there an overflow capacity for the local road system during peak periods?
Clarity of directional signage	 Are the main travel routes within the Destination and to the Local Sites well signposted? Is there adequate directional information available for individual tourists and group tour leaders? Are the main points of tourism interest within the Destination clearly signposted?
Physical capacity of local infrastructure	 Is the physical infrastructure capable of supporting peak levels of tourism demand that are well in excess of normal community needs? Is there undue competition for local infrastructure and services between visitors and local people at peak times?

6.3 Enhance Operational Capacity of the Destination

6.3.1 Establish Administrative Responsibility for Congestion Management

The issue

The responsibility for managing tourism congestion around Destinations rests with the Public administrative authorities, but the actual responsibilities and consequences can be widely diffused.

A number of local and other government agencies and private sector service suppliers may be involved. These may include long distance transport and navigation, airports, railways, sea ports, customs and immigration, roads and land transport, traffic police and security, environmental management, waste management, power supply, communications services, land use planning and development control, heritage management, business promotion, public domain and landscaping agencies and others.

- Establish an individual/department within the public administrative authorities with overall responsibility for coordinating government and private sector agencies action relating to congestion at natural and cultural sites;
- Ensure that all relevant public sector agencies and private sector service suppliers cooperate with the responsible coordinating agency to plan for and manage tourism congestion in the destination;
- Establish a regular dialogue among all relevant parties.

In Australia, the NSW State Government has adopted a strategic whole of government tourism development plan, which has been endorsed at the highest level of government. The plan coordinates all those government departments involved with visitor management such as national parks, heritage management, urban and regional planning, environmental management, forest, roads and traffic, police, public transport and tourism.

Source: www.tourism.nsw.gov.au/masterplan

6.3.2 Improve Local Traffic Management

The issue

The efficiency of local traffic management is a critical factor in managing congestion during peak periods. A cooperative relationship is required, supported by management controls or agreements regarding scheduling, parking and other operational factors.

Tourism transportation companies have a commercial expectation that they should have reasonable, if not unrestricted access to destinations, to ensure the efficient movement of their customers.

Recommended actions

- Ensure that there are effective and practical traffic congestion management systems;
- Ensure there is a close working relationship between local traffic management and police agencies, with sufficient personnel and operational procedures deployed at peak periods.

The International Road Transport Union web site (www.iru.org) carries a Statement of Principles Regarding Access for, and Parking of Tourist Coaches in Tourist Towns and Sites. In particular, it states "there is an urgent need for action, wherever necessary, against an increasingly restrictive policy on the part of certain tourist towns against the traffic and parking of tourist coaches. The Union believes that coach tourism is a major instrument for the development of these same towns and of the tourist economy as a whole."

6.3.3 Improve Peak Activity Management of Special Events

The issue

Special events at sites often generate high levels of congestion. These include religious festivals, pilgrimage events, arts festivals and celebrity performances, traditional community festivals, sporting events, and national celebrations.

- Ensure that special event management plans have been developed in conjunction with the event managers;
- Ensure that adequate preparations have been developed to manage large crowds, including transportation, accommodation and food services, security and waste management.

The historic pilgrimage city of Kandy, in Sri Lanka, draws millions of visitors each year to its major religious festivals. Many other places experience similarly high numbers of visitors to special events. Careful planning and considerable effort by the organizers and destination managers is called for to minimize congestion.

6.3.4 Improve Physical Capacity of Local Road Systems

The issue

The capacity of local access routes are often inadequate for managing congestion during peak periods.

Recommended actions

- Ensure major traffic routes between destinations and nearby sites are able to cater for high levels
 of tourism activity, with secondary routes available in peak periods;
- Provide adequate parking at key locations, with overflow capacity in peak periods;
- Ensure that the upgrading of access routes and parking areas does not adversely affect the character and attributes of the locality.

6.3.5 Improve Directional Signage and Information

The issue

Visitors to any destination or site require good signage and information. This applies to movement on foot around towns or cities, or by vehicle to and from natural or cultural sites in the vicinity.

Recommended actions

- Ensure that good signage has been installed for both self-drive vehicles and coaches;
- Ensure directional signage highlights local attractions and facilities;
- Ensure that visitor information is available, especially during periods of high activity.

6.3.6 Improve Physical Capacity of Local Infrastructure

The issue

High levels of tourism activity to a site place increased demands on local infrastructure including airports, seaports, roads, accommodation, electricity and water supply, communications, sewerage and waste disposal, personnel and services.

- Ensure that short term resources are available to supplement physical infrastructure in peak tourism periods;
- Ensure that destinations with high levels of tourism activity allocate some of the tourism revenue captured to the conservation of those features for which the region is recognized. Such investment will contribute to the sustainability of the tourism assets, as well as to the quality of life and selfidentity of the local community.

The World Heritage listed historic town of Bhaktapur, in Nepal's Kathmandu Valley, has implemented a long-term programme of applying entry fees from tourism to the conservation of the historic buildings in the town. A similar application of revenue has seen significant investment in the historic town of Hoi An in central Vietnam and the revival of several historic buildings in the ancient Philippine town of Vigan.

Influencing Tourism Demand to Minimize Congestion at Natural and Cultural Sites

7.1 Influences on Demand for Natural and Cultural Sites

The question is – are there measures that can influence demand for natural and cultural sites which lead to the spreading of demand in time and space? The result of which will be the eradication of peaks in demand.

1 Information

Information needs to be made available to potential visitors, tourist boards, tour operators, which conveys an awareness of what is offered in the main site but also in other sites nearby. In addition, indications of busy periods, ticket prices and a limited number of timed tickets will help to spread demand.

2 Incentives

Pricing incentives will reduce high season demand and encourage low season demand, as well as encouraging specific groups (e.g. children, students, retirees or local people to visit at certain advantageous times).

3 Alternatives/Substitutes

The development and communication of attractive alternative substitute sites is a useful way of spreading demand geographically.

4 Government policies

School vacation periods are decided by the education ministries which are concerned with educational outputs not vacation periods. The effect is to concentrate vacation periods into a few weeks a year. Can government be persuaded to change vacation periods?

5 Factory shutdowns

Factory closures cause particular areas to experience specific surges in demand. Although less influential than hitherto, as a result of the contraction of manufacturing in many OECD originating countries in favour of service industry jobs. Can artificial surges in demand be eradicated?

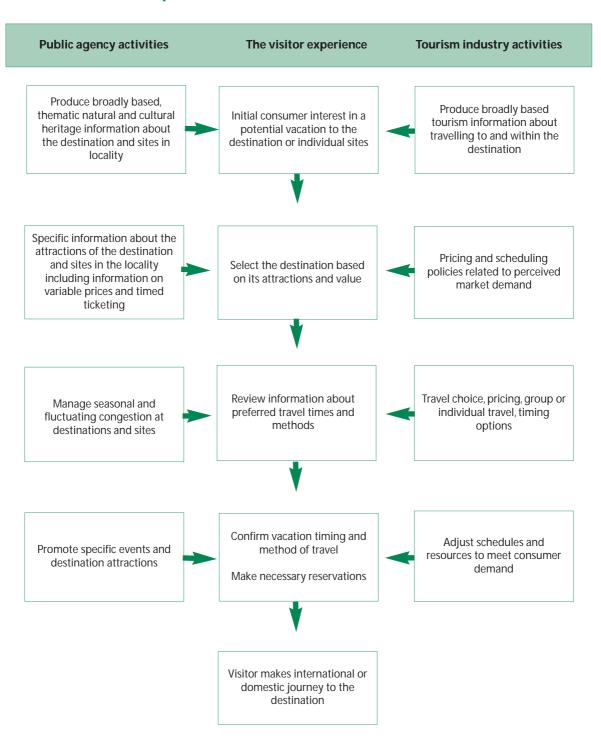
7.1.1 Key Stakeholders

The Key Stakeholders involved in demand management related to tourism congestion are:

- Destination managers:
- Natural and cultural site managers;
- Tourism promotion agencies in host countries;
- Travel media and tourism guide publishers;
- Natural and cultural heritage media;
- Outbound tour operators;
- Transportation companies;

- Incoming tour operators;
- Local tourism service suppliers.

7.1.2 The Visitor Experience of Tourism Demand



7.2 Analysis of the Influences on Tourism Demand

All stakeholders need to understand the factors affecting tourism demand at a destination or site in order to better manage tourism congestion on a cooperative basis and to improve the quality of the visitor experience and their appreciation of the place.

Data about the main source markets and the demographic nature of visitors, as well as the timing, frequency and duration of peak tourism activity, will assist in the development of travel incentives, alternative attractions and well targeted promotional campaigns that encourage travel outside peak periods.

It is useful to identify the most popular attractions within any destination, site or group of sites to develop and promote additional or complementary attractions.

7.2.1 Other Influences on Tourism Demand

Key influence on tourism demand	Checklist questions
Major source markets	 What percentage of visitors come from other countries? What percentage of visitors come from other parts of the same country? What percentage of visitors come from the immediate locality or surrounding region? Are there major new source markets emerging that will greatly increase the numbers of visitors?
Major vacation periods in source markets	 Do particular national, seasonal, religious, education or industry vacation periods in the source markets generate major tourism activity? Do these vacation periods occur simultaneously, reinforcing the flow of inbound tourists?
Public information about the destination or site	 Is natural or cultural information about the place widely available through a variety of media? Do the media concentrate on a limited aspect of the place or on its overall features?
Marketing and promotional campaigns about the destination or site	 Does the place regularly feature in government travel promotional campaigns? Does the travel media in source markets regularly carry features about the place? Are there joint promotional campaigns run with complementary or nearby places?
Travel pricing and packaging	 Do major inbound tour operators regularly include the place in travel packages? How does ticketing/pricing information reach the end consumer prior to purchase? Are there particular times during the year when tour operators and transportation companies offer more competitively priced travel packages?

7.2.2 Physical Influences on Tourism Demand

Key influence on tourism demand	Checklist questions
Seasonal factors at the destination or site	 Do seasonal weather patterns have a strong influence on the level of tourism at the place? Do seasonal factors greatly influence different natural characteristics of the place? Do seasonal factors greatly influence community or cultural activities at the place? Is the place more physically accessible at certain times of the year?
Special reputation of the destination or site	 Does the place have special features or attractions that are widely recognized in source markets? Has the place received a special recognition, such as world heritage listing or been widely featured in the media? Has there been a significant historic or recent event at the place that is well known in the source markets? Has an event taken place in a competing place that might discourage tourism there for a period of time?
Periodic events or festivals that attract tourists to a destination or site	 Do periodic events, celebrations, religious or cultural festivals, sporting events or similar activities generate high levels of inbound tourists?
Important historical event or association at the destination or site	Has there been an important historical event or association that generates a high level of tourism interest in the place at a particular time of the year?
Special characteristics of the destination or site	 Do particular features of the place enjoy a high reputation among visitors? Is there good physical access from the destination to the site?
Complementary places	Are there nearby places that can provide complementary attractions?
Frequency and ease of travel to destination or site	 Is the frequency of scheduled transportation to the place severely reduced in quiet periods? Is the place readily accessible for out of season visitors?
Availability of tourism services	 Are tourism facilities and accommodation severely reduced in quiet periods?

7.3 Enhance Operational Influences on Tourism Demand

7.3.1 Encourage Expanded Travel Periods in Source Markets

The issue

The timing and duration of major national or regional vacation periods have a direct impact on tourism congestion in destinations and sites.

Recommended actions

- Persuade governments of source markets to extend major vacation periods or long weekends to spread the numbers of arriving visitors over longer periods;
- Persuade governments to coordinate local vacations with those in major source markets to spread tourism demand in peak periods;
- Promote off-season travel to the place in market segments, such as retirees, backpackers and conferences, who are less reliant on major vacation periods;
- Develop carefully targeted promotional campaigns in major emerging markets to encourage travel outside existing peak periods, wherever possible.

In Australia, different State governments have agreed to stagger the spring and autumn school vacation periods to spread the tourism loads and extend business opportunities for tourism operators.

The six week summer vacations, and other major holidays in Germany are at different periods in the different Länder, ranging from early June till late September precisely to avoid congestion. The original motivation for such a policy was to reduce traffic congestion, but there is an added benefit in spreading visitor loads on natural and cultural sites.

7.3.2 Encourage Better Communication to Final Consumers

The issue

Most consumers receive limited information relating to visits to natural and cultural sites prior to purchase, particularly relating to pricing and timed ticketing.

Recommended actions

- Develop comprehensive communications policy (see 5.1, p. 22);
- Create website providing all relevant information;
- Ensure that all inbound tour operators have all the relevant information to pass on to outbound tour operators;
- Ensure that the information centres and Local/Regional and National Tourism Boards are provided with full information;
- Encourage National Tourism Boards to pass on full information to outbound tour operators from all originating markets.

7.3.3 Encourage Promotion of Low Season Travel

The issue

Potential visitors are not made fully aware of the economic and practical incentives of low season travel.

Inbound tour operators, transportation companies and local tourism service providers typically offer attractive packages to encourage off-season tourism in order to utilize their operational resources for longer periods throughout the year.

Promotional campaigns by destination sites and the industry either individually or in combination with nearby or complementary attractions are an important generator of tourism activity outside peak periods.

Recommended actions

- Encourage natural and cultural heritage media to present and promote low season attractions about the place;
- Encourage travel and tourism media to present and promote low season travel to the place;
- Encourage inbound tourism operators to develop tour packages that specifically encourage tourism for non-peak periods;
- Develop promotional campaigns to specifically encourage tourism for non-peak periods.

7.4 Enhance Physical Influences on Tourism Demand

7.4.1 Develop Low Season Attractions and Events

The issue

Potential visitors are not offered attractive enough reasons for visiting the destination in low season

Recommended actions

- Destinations and sites should develop attractions and events to attract visitors in low season periods;
- Develop a range of low season attractions in natural sites such as viewing fauna life cycles, animal migration, and the seasonal character of the landscape;
- Develop a range of low season attractions in destinations and cultural sites such as community festivals, seasonal cuisine;
- Encourage the staging of major celebrations, exhibitions, performances, educational and sporting
 events outside periods of high tourism activity.

Many of the so-called block-buster art exhibitions at major art galleries around the world are held outside peak tourism periods.

The now well-established European Heritage Open Days are held on weekends throughout September, with 48 different countries holding the event on different weekends. A major programme such as this provides an excellent example for generating domestic tourism away from the peak summer period. In Holland, in 2003, when nearly 4,000 historic properties attracted some 850,000 visitors during the second weekend in September.

The annual Carnivale Festival in Venice is held in January, outside the peak summer time congestion, creating a major boost for off-season tourism.

At the Dubbo Open Plains Zoo in western New South Wales, Australia, visitors are invited to join special "dawn tours" into areas of the Zoo not available to visitors during the day. These popular tours end before the Zoo opens to other visitors, spreading the tourism loads and reducing congestion during the day.

7.4.2 Expand the Range of Attractions

The issue

Visitors will naturally be drawn to the most famous, the most characteristic or the most heavily promoted features within a site. Many sites promote themselves with this single core value or primary attraction, without emphasizing other characteristics or complementary attractions.

The main problem for any site with a narrow primary imagery is the tendency of visitors and tour groups to focus on that attraction, often to the exclusion of all else. Visitors tend to congregate at the main attraction, generating congestion at the very place in the site with the most sensitive natural or cultural values.

Recommended actions

- Develop carefully planned access, educational and/or interpretation programs to the natural or cultural features of the place that are less well known or visited;
- Create access to similar sites that could substitute the experience of the main site;
- Encourage the expansion of retailing or visitor facilities into other sections of historic towns if this
 will provide benefits for the local community and spread tourism pressures from overcrowded
 precincts.

The Spanish island of Mallorca is expanding its tourism image away from the traditional summer holiday mass market towards the development of additional market niches such as the cultural attraction of numerous art galleries and museums and off-season walking tours in the mountains.

Singapore has been extensively repositioned in the tourism market. In the 1980s it was known primarily as a cheap shopping venue, one of several in Asia. Since the 1990s the national government has undertaken numerous programmes, including major investment in cultural attractions and multi-cultural characteristics and major marketing campaigns, to reposition Singapore for its lively cultural diversity and Asian flavour.

Additional areas that are not normally available to visitors within the overall precinct at the Hyde Park Convict Barracks in Sydney are opened up on days when very high numbers are expected. At an historic farm complex on the outskirts of Sydney, special outdoor events and displays entertain visitors who are unable to gain access to closely controlled internal spaces.

The historic town of Hoi An in central Vietnam, has developed a special programme to spread tourism activity into adjoining areas of the town, reducing the traditional focus on the waterfront market areas. This has reduced the tourism and commercial congestion on the waterfront, and provided income and investment opportunities for a larger number of property owners and operators in the town.

7.4.3 Encourage Joint Promotion with Complementary Sites

The issue

Potential visitors are unaware of other existing opportunities to visit the Destination and, as a result, focus on visiting only the well known sites.

Recommended actions

- Encourage heritage and tourism media to present information on a range of places that are complementary to the Destination or Site, in order to spread tourism demand across a larger area;
- Develop joint promotional campaigns with complementary places to distribute the flow of visitors in peak periods or extend the period when visitors might be attracted to the whole group of places;
- Develop joint ticketing with complementary sites to share the flow of visitors in peak periods.

At Arles, in southern France, visitors to individual Roman monuments within the town are offered a joint entry ticket, at reduced overall prices, to as many as ten other sites within the town. This not only raises awareness but spreads the tourism activity across other locations, minimizing the risk of congestion. A similar joint ticketing and promotional system has been introduced in Kairouan, in Tunisia, one of the most important Holy Cities of Islam. The UK National Trust offers international visitors to Britain a Tour Pass that encourages them to visit a wide range of properties across the country at an economical entry cost.

The Pennsylvania Anthracite Heritage Museum is located adjacent to the Lackawanna Coal Mine Tour in McDade Park, Scranton, Pennsylvania. In 1997 the coal mine tour was one of the most congested industrial heritage sites in Pennsylvania, while the museum languished. A combination ticket was developed using ID (barcode) technology, providing discounted admissions at several nearby sites and at both the museum and the mine. By encouraging museum visits while patrons waited for mine tours, congestion at the mine entrance was mitigated and visitor loads between the two sites were better balanced.

Fallingwater, the iconic Frank Lloyd Wright Kaufmann residence at Bear Run, Pennsylvania in the United States, receives 125,000 visitors per year, who gather in groups of fifteen for a 45-minute tour. While there is currently no combination ticket, a sister site, Wright's Kentuck Knob house is located a few miles away. As Fallingwater reservations fill, Kentuck Knob takes the overflow. A coalition of several dozen museums and other neighbourhood attractions and businesses in Washington DC have banded together to attract visitors to places beyond the monumental core between the Capitol, Lincoln Memorial, and the White House.

7.4.4 Encourage Expanded Low Season Travel Capacity

The issue

Local tourism service suppliers and transportation companies often scale back their services outside peak travel seasons as they are unprofitable. This can result in the closure of hotels, shops, restaurants, and the withdrawal or curtailment of transportation services on planes, ships, and coaches. Employment within the local community can also suffer in low season periods.

However, if visitors are to be encouraged to make their journey in low season periods, there must be an adequate level of transportation, accommodation and other services available.

Recommended actions

- Develop viable, attractive proposals for tourism in low season and thus persuade international and national transportation companies to provide an appropriate level and frequency of services in off-season periods;
- Persuade local tourism service providers to remain open and provide an appropriate level of services in low season periods;
- Persuade local authorities to ensure that the place is physically accessible in low season periods or inclement weather conditions.

Key Terminology

Destinations

Places in which the visitor spends at least one overnight stay. They provide visitor arrival facilities, background physical infrastructure, such as accommodation and tourism support services for the various heritage sites and other attractions within their vicinity. Destinations have physical and administrative boundaries defined by their regional context. Local tourism destinations encompass the local host community, who will often form a major component of the visitors to nearby heritage sites, and are the ones most impacted upon by high levels of seasonal tourism congestion.

Sites

Places with natural and/or cultural values and distinctive characteristics or meanings, typically with a discrete physical ensemble of features that are identified, respected and protected as places of special value. Many Sites are in public ownership and operate within strong legal or regulatory frameworks; others include large areas of private property. It is common for sites to have both natural and cultural values or characteristics.

Natural Sites

In the context of this Handbook, include precisely delineated, relatively undisturbed areas that demonstrate ecological significance from the point of view of science, conservation or natural beauty. They also include scenic landscapes, as well as coastal and marine environments that are attractive to visitors.

Cultural Sites

In the context of this Handbook, describe a site, place or area of heritage significance that contains a number of buildings and structures, a cultural landscape, monument, archaeological site, historic building or other structure, religious and cultural institutions, or historic human settlements, together with the associated contents and surroundings or cartilage. They may have special meaning to an indigenous community. Cultural institutions such as museums and art galleries are included in this category.

Stakeholders

In the context of this Handbook, "Stakeholders" are all of the people and organizations who take part in the process of tourism, from those who produce the material that helps a future visitor determine the nature of their vacation, to those who organize the transportation, manage the Destination and ultimately manage the Heritage Sites, places and attractions that the tourist visits. The visitor is a key stakeholder in the process, as is the Local Community.

Demand management

Refers to all those actions taken by the variety of stakeholders in the tourism process that influence the decision by an individual, or group of individuals, to visit a certain place at a certain time of the year.

Destination management

Refers to all those actions taken by the responsible local authority and the variety of stakeholders in the tourism process that ensure a sustainable and responsible form of tourism which respects the place, the host community and the visitor.

Site Management

For the purposes of controlling tourism congestion, site management refers to all those actions taken by site managers and other stakeholders that produce a positive outcome for the management of visitor activity at the site.

Conservation

Describes all of the processes of looking after a place, cultural landscape, heritage collection or an aspect of intangible heritage so as to retain its natural, cultural or indigenous heritage significance. In some English speaking countries, the term preservation is used as an alternative to conservation for this general activity.

Sites of Differing Heritage Characteristics

World heritage sites

Have been recognized by the World Heritage Convention, set up by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in 1972, for their outstanding universal value. There are over 750 such sites distributed widely throughout the world. World Heritage Sites can be listed for their natural or cultural values, for a combination of these values or as cultural landscapes. (See www.unesco.org then *culture*, *world heritage*) There is an expectation that these sites are carefully managed and controlled, often at a national level, to protect the values for which they were recognized. Tourism congestion presents a challenge for many World Heritage listed sites that have become popular tourism attractions.

National heritage sites

Contribute to the identity of nation states. They are often used to establish clearly distinguishable brands in the national and international tourism marketplace. National sites can attract large numbers of domestic visitors, especially if they are recreational or pilgrimage sites, or are the setting for national or religious festivals and ceremonies. Congestion at such events places extreme pressures on the sites. Many are protected under national heritage legislation or may be carefully managed by traditional or indigenous custodians.

Local sites

Those which are well recognized for their contribution to local community identity and cultural values. They can be popular places for local tourism and will often be widely promoted in an effort to generate increased business activity through tourism. Many are protected under local heritage or planning legislation, and may experience high levels of tourism activity in vacation periods

Tangible and intangible cultural heritage values

Natural and cultural sites typically contain a combination of tangible and intangible heritage values.

Tangible cultural heritage

Encompasses the created works of humankind and/or places of meaning to specific groups, including indigenous or traditional owners. These include natural geographic features, villages, towns and cities, buildings, open spaces, landscapes associated with an historic event, literary or artistic figure, structures, art works, documents, handicrafts, musical instruments, furniture, clothing and items of personal decoration, religious, ritual and funerary objects, tools, machinery and equipment, and industrial systems. (source: ICOMOS International Cultural Tourism Charter)

Intangible cultural heritage

Can be defined as all forms of traditional and popular or folk culture, the collective works originating in a given community and based on tradition. These creations are transmitted orally or by gesture, and are modified over a period of time, through a process of collective re-creation. They include oral traditions, customs, languages, music, dance, rituals, festivals, traditional medicine and pharmacopeia, popular sports, food and the culinary arts and all kinds of special skill connected with the material aspects of culture, such as tools and the habitat. (source: *ICOMOS International Cultural Tourism Charter*)

Sites of mixed heritage values

Many sites represent a combination of natural and cultural heritage values, often reflecting the response of human settlement to the particular geographic or ecological features of a place. They are inherent in the concept of cultural landscapes and the IUCN Category V Protected Landscapes or Seascapes. Tourism to such places must respect the interaction of complementary values, not only for their contribution to the attraction of the place but also for the protection of those values.

The precinct and the attraction

Many natural and cultural heritage sites and places rely on their wider setting or context to protect their essential characteristics and values. Buffer zones or carefully managed ecological and visual curtilages are often established as part of the management framework for protected parks or heritage sites.

Many historic places are located in rural or urban settings that reinforce their heritage values. A square or plaza outside a church or public building, a rugged coastline surrounding an historic lighthouse, fortress, or an enclosed valley protecting the isolation of historic monasteries are examples of the need to consider the wider setting of natural and historic sites. The movement of tourists through the surrounding urban or rural context is an important feature of congestion management. Excessive numbers of vehicles or pedestrians can degrade the sense of isolation or simply disrupt the visual attraction of a place.

Environmentally sensitive natural areas

These are often controlled and managed under strong national and international legislation or standards, with management activities and relationships with the tourism industry regulated through a management plan. The World Conservation Union (IUCN) has established a categorization system for environmentally sensitive areas. The degree of ecological sensitivity also establishes the relationship to public and tourism access that is permitted or accepted by the managing agency.

The following descriptions have been drawn from the IUCN 1994, *Guidelines for Protected Area Management Categories*, Gland, Switzerland, pp 18-23.

Wilderness areas

These correspond to IUCN Category Ib: Wilderness Area: Protected Areas, managed mainly for wilderness protection.

They typically comprise a large area of unmodified or slightly modified land and/or sea, which retains its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition. Public access is generally limited, provided at levels and of a type that will best serve the physical and spiritual well-being of visitors and maintain the wilderness qualities of the reserve or zone for present and future generations.

National parks

These correspond to IUCN Category II: National Park: Protected Areas, managed mainly for ecosystem conservation and recreation.

They typically comprise natural areas of land and/or sea, designated to protect the ecological integrity of one or more ecosystems for this and future generations, to exclude exploitation or occupation inimical to the purposes of designation of the area, and to provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

Visitor use is generally managed for inspirational, educational, cultural and recreational purposes at a level that will maintain the reserve or zone in a natural or near natural state.

IUCN Categories III (Natural Monument), IV (Habitat/Species Management Area) and VI (Managed Resource Protected Area) can also be regarded as relevant to this section, as visitor use and recreational activities are allowed in all three categories.

Protected landscapes/seascapes

These correspond to IUCN Category V: Protected Landscape/Seascape: Protected Areas, managed mainly for landscape/seascape conservation and recreation.

They typically comprise an area of land, with coast and seas as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, cultural and/or ecological value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

Opportunities for public enjoyment can be provided through recreation and tourism activities that are appropriate in type and scale to the essential qualities of the reserve or zone.

Scenic or cultural landscapes

Scenic landscapes that are not protected (and therefore do not correspond to IUCN Category V) are not formally recognized in international conventions. They are of great visual attraction to both visitors and the local community and may be protected under local planning legislation or regulation. Scenic landscapes comprise rural areas or coastlines that may be privately owned, contain human settlement or evidence of agricultural practices. Such landscapes are often popular with visitors for walking, cycling or driving holidays. They often have no defined gateway or entry. Access for visitors is usually by local roads or walking paths.

Archaeological sites

Archaeological sites, including burial sites, contain physical or material evidence of a past human activity. The site can be totally archaeological or it may be a component of a larger site, which also contains standing structures or buildings from a later period that are still in use. Many ancient structures are still in use by local communities but are still considered as archaeological places. Many archaeological sites or ancient structures were originally ceremonial centres or places of worship. A number of them are still used for this purpose by local inhabitants and others. Sites such as Teotihuacan in Mexico and Angkor in Cambodia can be regarded as both archaeological sites and places of worship.

Archaeological sites can be located in isolated coastal, rural or natural settings or can be located within urban locations if the place has continued to support human settlement. They may contain the only known remnants of a particular social group or historical period and have a value for researchers and conservationists. Archaeological sites are often in spectacular settings. Good presentation can create an evocative imagery for the visitor.

Historic urban centres and historic villages

The nature of these sites can be quite varied. They include the historic centres in larger towns, entire historic towns and cities, historic villages or tightly arranged settlements located on hilltops or steep terrain. They typically contain evidence of a wide range of activities including defence, commerce, industry, trade, worship, administration and housing. Many contain a range of tourism attractions.

Due to their continuity of use over a long period, most places contain physical evidence from many historical layers of development, including archaeological remains and buildings that have been used and adapted for different uses. Some historic villages are managed as "museums" or static replicas of former settlement. Most have a living community that is an integral part of their nature and identity. There is usually a close association with the geographical setting that historically generated and sustained the human activity, such as a river, fertile landscape, mountain pass, seaport or trade route.

Historic urban centres usually have a large variety of property owners and occupiers, both public and private. Their primary function is not tourism but an active and productive lifestyle for the local population, even when tourism forms a large or seasonal part of their daily lives. The management of tourism pressures involves complex interactions between many aspects of the place and often requires close collaboration between many government agencies, local businesses and the tourism industry. Accordingly, historic towns are often managed as destinations rather than as sites.

Individual sites in an urban context

These include major historic monuments and buildings, enclosed or defended precincts, public and administrative buildings, places of trade, commerce and industry, prisons, hospitals, housing and places of assembly, located within an urban context that otherwise possesses no particular historical merit. Alternatively, individual monuments may also be regarded with particular interest even though they are located within an historic urban setting.

Individually or in conjunction with other historic buildings, these places contribute to the identity of the place and provide a valuable economic and cultural resource for the local community. Historic buildings can be in private, public or community ownership and may have legislative recognition and protection. Many contain active contemporary uses, while others are managed as museums or for other cultural activities. The intensity and conditions of public access vary in accordance with the ownership, use and cultural heritage values of the place.

Open areas in an urban context

The spaces between buildings in any urban centre are a major component of its life and identity, places of human interaction and exchange. The public spaces are often the only part of a town or city that the visitor has the time or opportunity to inspect and appreciate.

Public spaces include parks and gardens, streetscapes, squares, piazzas and plazas, riverbanks and canals. They can be small, complex and intimate or open, formal and ceremonial. Many provide the setting for public events, parades and festivals, ranging from local celebrations to major festivities.

Places of worship

Places of worship have a particular nature and spirituality that is inherent in their use and meaning. Places of worship include churches, mosques, temples, synagogues, monasteries and funerary settings, each with their own architectural, artistic and ceremonial traditions and character. Some places have been the site of worship for a number of cultures or religions and on occasions for multiple religious expression simultaneously, others are the setting for major public occasions such as weddings, coronations, memorials or funerals.

Such places can be within urban centres, rural settings or in isolated locations. They can involve continuing ceremonial or religious practices, either original or adapted, or represent the archaeological remnants of past practices. Some places of worship have been adopted and adapted by succeeding generations for forms of worship or religious practices quite different from the original. Places of Worship are often associated with a custodial community, many of who live within close proximity of the site. Some places of worship are claimed by a number of different religious communities. Indigenous peoples often regard whole landscape systems as spirit places, relying on topographical features rather than some constructed buildings or remains.

Tourism at places of worship should always respect the right of believers to worship in their own fashion. Tourists, or non-believers, may be prevented from entering certain parts of a place or from entering during religious services. The mystical nature of such places usually requires that visitors should be respectful of the atmosphere and considerate of other people who are present.

Museums, art galleries and other cultural facilities

Cultural institutions are usually created to collect, conserve and display collections or manifestations of scientific, historical, artistic, cultural or community interest. These cultural institutions may include museums, art galleries, cultural centres, and performance spaces for the presentation of contemporary, classical or traditional music, dance, literature or ceremonies.

Their scale varies from major national centres with international reputations to small, localized displays of material related to a single site or community. Such places normally welcome visitors as part of their operational activities. Many rely on income derived from visitors to sustain or contribute to their operational budgets. Tourism management is often closely related to the design of displays, exhibitions and performances, the arrangement of public spaces and the location of retail or refreshment outlets.

Indigenous and traditional communities

Traditional ensembles or indigenous settlements in many parts of the world sustain living communities in a manner that protects and enriches traditional values. There is often competition between these traditional values and the external pressures of contemporary life.

Tourism to such places is often carefully managed to minimize undue tensions and to protect the values and privacy of the community.

Confined sites in isolated settings or locations

There are numerous examples of confined sites in isolated settings that reflect long lost human activities, but which remain as attractive places for tourists to visit. These include fortresses, castles and defensive sites, monasteries and other religious places, lighthouses, historic houses, or historic industrial sites.

In some cases these sites remain in active use, although not necessarily for their original use. Many are located within scenic or protected areas and remain in private ownership. The management of access to such sites and their limited capacity to accommodate large numbers of vehicles or visitors are important considerations for tourism management.

Open sites in rural settings

Open sites in rural settings include parklands and cultivated gardens, former or continuing agricultural areas, walls, terraces, barns, irrigation systems and cropping, historic battlefields and defensive structures, historic infrastructure and transportation corridors such as ports, dams and canals, historic or scenic roadways or even major outdoor sculpture.

Thematic heritage trails and cultural routes

Many heritage sites have strong historical or functional linkages with other, similar sites and are part of "heritage trails" or "cultural routes". These sites include the great ancient and medieval pilgrimage routes, overland trading routes, maritime trading routes, settlements or historic buildings related to a particular cultural group or historic development phase, or networks of historic lighthouses and watch towers.

Tourism to such places can include a linear connection along part of the collection, or site specific visits to a particular feature within the larger network. Such collections provide excellent opportunities to distribute high levels of visitation to related sites as a long-term technique to manage congestion at particular sections.

Optimizing the Management of Congestion at Destinations

Outcomes Tourism industry Public agency activities activities Monitor tourist movement Establish the methods of and activities within the travel and movement by Monitor market demand destination and produce visitors levels to ascertain the most relevant data popular methods of Establish the preferred movement and places to visit Assess the capacity of the carrying capacity of the and produce relevant data destination to manage the destination to host visitors, existing levels of tourist particularly at periods of high Identify aspects and locations activity and congestion activity where tourism congestion is negatively impacting on the Identify the aspects and Jointly identify areas where efficiency of local operators locations where tourism improvements can be made and service suppliers to cater congestion is negatively to minimize the negative for tourist requirements impacting on the destination impacts of tourism congestion and the local community Upgrade the level of signage and information provided to Increased information and tourists to ensure they move Ensure efficient movement of assistance provided to visitors through the destination as tourists from arrival points to efficiently as possible local accommodation Improved local signage Upgrade arrival points and Ensure local service suppliers Improved traffic management routes into destination as are capable of servicing at peak times necessary fluctuating tourism levels Improved capacity at entry Upgrade local physical Cooperate with local points to handle peak tourism infrastructure and public destination managers to plan activity transport as necessary for the efficient movement of visitors and coordinated Improved local infrastructure Upgrade local environmental activities at peak times capacity to handle peak loads and community infrastructure as necessary The destination has a greater ability to manage tourism activities and avoid congestion

Sample of Indicators for Natural and Sensitive Ecological Sites

The WTO Indicators of Sustainable Development for Tourism Destinations: A Guidebook.

Page references not included as they refer to the Guidebook.

Issues	Suggested indicators
Ecological value	
Representativeness: (whether the resource has characteristics typical of the ecosystem)	 N° of species typical of the area present at the site (and numbers of individuals); N° of unique or rare species present at the site (and numbers of individuals).
Uniqueness (rarity of the site relative to group (e.g. wetland, desert)	 % of site area occupied by rare or unique species; N° of individuals in the population of rare and unique species; % of endemic species at the site.
Level of site protection	 > % of area subject to control (IUCN categories); Recognition by international programmes (e.g. UNESCO World Heritage Site or Biosphere Reserve, RAMSAR Convention); (Note: international recognitions can be also important indicators of tourism value, as signs of uniqueness and ecological value) See parks and protected areas.
Tourism value	
Fragility: degree of susceptibility to impacts related to tourism and recreational activity	 N° of species and endemic species; N° of species and endemic endangered species; Populations of every species; Temporal rate of variation of species.
Tourism feasibility: (access, easements, traditional uses, management capacity (to ensure its protection and/or enhancement), economic viability restoration costs, operation and maintenance costs)	 Level of acceptance of the tourism activity by the local community (% positive); Inventory of attractions (distinguished natural features, including flora and fauna, landscapes); N° of observations of fauna or flora per circuit and per season; N° of days of observation of the natural features per season (e.g. Aurora Borealis, tours to Antarctica, whale mating, migratory birds); Profitability of tourism activity at the site (% return on investment, net incomes – visitor fees, concession fees, fees for guiding and other services, sales of handicrafts and other items, etc.); Management capacity: presence of a management body; plan; site restoration and regeneration programmes. (% of site covered); Cost of acquisition/protecting/restoration of the site; Estimated time to full restoration of the site (for degraded sites).

Issues	Suggested indicators
Educational-interpretive value: (value of the site for educating and awareness raising - natural sciences, history and local traditions)	 N° of opportunities for interpretation and education at the site (existence of guided visits, printed self-explanatory materials, interpretive and informative panels, trails, interpretation centres, farm schools, nature schools, educational itineraries, etc.); Natural and educational value given to the site by educators (local, provincial, national, international organizations), by NGOs, by Tour Operators. (Subjective ratings – use questionnaire).
Accessibility: refers to the ease with which the place can be visited	 N° of access routes in good condition for tourism use, (paths, motorized, airstrips, boat access, etc); % of site accessible to those with disabilities (see Accessibility).
Attractiveness: includes parameters of an aesthetic, emotional, or perceptual nature	 Aesthetic/perceptual evaluation by the visitor (See Exit questionnaire Annex C); Presence of key ecological features of the site in media and tourism promotional materials.
Tourism carrying capacity of the site: the site's capability to serve as the venue of tourism/ recreational activity	 N° of visitors acceptable, according to the perception of the visitors themselves. (see Annex C and Arches case); N° of visitors acceptable, according to the capacity of the equipment and facilities of the site. (depends on capacity studies establishing limits); N° of visitors acceptable, re capacity estimates; N° of visitors / n° of individuals per species,
Site management	
Tourism management plan for the site	• Existence of a tourism management plan for the site (also % of site covered by plan).
Regulation of the site	 Existence of rules to regulate construction, hunting and fishing, extraction of natural resources (e.g. logging) at the site (and % of key resources included); % of site with regulated zoning /controls, extent of tourism use zones
>> Use Intensity	 Nº and origin of visitors to the site per season (day, month); Average length of stay; Nº of tour operators with permit to operate at site.
Tourism management capacity of the site	 Annual expenditure on management and control; % of resources actually assigned / resources requested by the administration for the management of the site.
Tourism's contribution to site conservation	 Visitor fees; Concession fees; Donations from visitors and tour operators; Fees from guiding and other services; In-kind contributions (e.g. equipments, volunteers); Sale of goods (e.g. informative materials, handicrafts, equipment).

Issues	Suggested indicators
Management of spaces for tourism	n use
Trails and paths (see Destination section on Trails)	 % soil loss on trails (Example: depth and/or width of trails does not increase more than 5% per year at the most fragile sectors); N° of soil erosion points along trails and vehicle paths; % of protected area in eroded or degraded state; Vehicular congestion (average travel times on main access routes during high season / during low season).
Camping areas and accommodation	 Area or campsites per tent; N° of campfires allowed for camping areas; N° of erosion points in camping areas; Total density of camping use (persons per m2 in peak season; Number of campers per toilet; Number of beds (other accommodation); % occupancy of camping sites and accommodation.
Community participation	
Local community participation	 % of local products and services consumed by tourism (at least 70% of goods and services acquired for tourism operation of the site from local enterprises or individuals); Employment of local residents in site management and tourism operations (numbers, income levels); Level of satisfaction of residents regarding tourism development in the area – particularly regarding that targeting natural systems; Level of assistance to local environmental awareness: no of local awareness-raising actions (courses, meetings, promotion of content in the curriculum of the local educational system, etc.)
Ecosystem management	
Water quality	 Water quality: contaminants in surface and ground water (See Drinking water quality); Turbidity of streams.
Air, noise pollution	Noise pollution due to motors: visitors perceiving annoying motor noises (cars, launches, motorcycles, planes, generators, etc.) in natural areas.
Impacts on flora and fauna	 Biodiversity index of flora and fauna; Population sizes of key species; N° of introduced species (exotic fauna and/or flora) (% of total); Level of illegal hunting and fishing at the site during high season (loss of animals, number of incidents); Loss of species due to use as tourism souvenirs (% of native species used as tourism souvenirs); Numbers of fauna run over by traffic (road-kills) during high season (ratio to low season rates); % increase in infectious diseases (local and introduced) to flora and fauna of the site; Frequency of species census; % variation of species; See also parks and protected areas.

Issues	Suggested indicators
Aesthetics	 Amount of litter in natural areas (seasonality of waste can relate to tourist numbers) (See > Solid waste management); Presence of visual barriers, visual pollution (use questionnaire to determine impact if visual barriers are considered important); Existence of viewpoints; Scenic valuation by tourists (perception, questionnaire).
Visitor satisfaction	
Visitors	• >> Level of satisfaction of visitors (see questionnaire Annex C).
Intermediaries	 Opinion of local tour operators (% of operators with favourable opinion) Use operator questionnaire; Opinion of foreign tour operators (% with favourable opinion).

Sample of Indicators

Parks and Protected Areas

The WTO Indicators of Sustainable Development for Tourism Destinations: A Guidebook.

Page references not included as they refer to the Guidebook.

Issues	Indicators
>> Visitor numbers	 > Total number of visitors to park and to key sites; > Peak numbers (peak day, month); Length of stay > Use intensity on key sites (persons per km²); Revenue from paid visitors; Number of guides/operators permitted to use park/protected area; % of all visitors who are in controlled/guided visits.
Integrity of key protected systems	 Number of sites/ecosystems/assets considered to be damaged or threatened (% of all defined systems/assets in protected area); Indicators of health related to key plant and animal species (see details in section on unique sites and on ecotourism); % of park hardened for visitor or other use; >> % of protected area subject to different levels of control (for example IUCN categories of protection and access).
Damage attributable to visitor activity	 % of protected system in degraded condition (where possible classified due to cause); % trails and routes (length) in damaged condition; Cost of repair to damaged systems (annually); % of park area affected by unauthorized activities (hunting, tree cutting, trapping, poaching, etc.); Number of incidents of poaching identified. (see Ecotourism and natural and sensitive sites)
Level of visitor control and monitoring	 Number of human/animal contacts reported involving injury or risk of injury; Number of crimes against tourists; Number of incidents of vandalism; % of visitors who do not pay for entry (where entry fee is charged); Number of wardens or control staff (and number per tourist).
Marketing	Amount spent on marketing the protected area.

Issues	Indicators
Management	 Number of park officials (wardens, managers, maintenance, etc.); Number of enforcement personnel per visitor; Cost of protection; Number of public/community meetings held with stakeholders including local periphery communities; Ratio of revenues to costs for park operations (see also tourism contribution to conservation).

Case Studies

Introduction

The Case Studies presented here provide illustrations of the way in which certain issues raised in the Handbook have been resolved in practice.

However, at this stage, there do not appear to be examples of universal best practice. As Site Managers are well aware, the solutions appropriate for one site are not necessarily appropriate for others, so studying the cases will often raise more questions than they answer. That is to say, the insights contained in the cases can lead to further questions about how site managers might resolve their own particular issues relating to congestion.

Case study template

- 1 Main source of information;
- 2 Edited by;
- 3 Location map and map of the site;
- 4 Identification;
- 5 Problems due to congestion;
- 6 Global approach:

Policy:

- Main objectives and planning
- According to: Demand management
- Destination management
- Site management
- 7 Specific measures and results obtained:

Procedure:

- Measures related to accessibility and circulation
- Visitor flow control measures within the site
- Measures related to entrance facilities and infrastructure
- Booking and advance payment of entrance tickets
- Communication policy
- Agreements with public authorities
- Collaboration with the local/international tourism industry
- 8 Consequences:
 - for the local community
 - for visitors
- 9. Further steps.

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- 1 Monteverde Cloud Forest Preserve, Puntarenas (Costa Rica)
- 2 The Alhambra (Spain)
- 3 Schönbrunn Palace (Austria)
- 4 Domain of Versailles (France)
- 5 Historic City of Kairouan (Tunisia)
- 6 Galapagos Islands (Ecuador)
- 7 Point Pelee National Park (Canada)
- 8 Canterbury Cathedral (United Kingdom)
- 9 Wieliczka Salt Mine (Poland)
- 10 Pointe du Raz (France)

MONTEVERDE CLOUD FOREST PRESERVE, PUNTARENAS, COSTA RICA

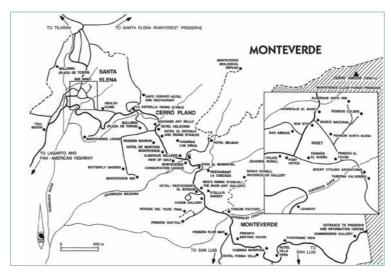
Main source of information: Mr. Rafael Bolaños Montero, Director of Monteverde Cloud Forest Preserve (information provided July-August 2003)

Edited by: Héctor Ceballos-Lascurain

Location Map of Monteverde Cloud Forest Preserve



Map of Monteverde area



Identification

The Monteverde Cloud Forest Preserve is a privately owned biological reserve, operated by the Centro Científico Tropical (CCT), Tropical Science Centre in English, a Costa Rican scientifically-oriented NGO. The reserve is located in northwestern Costa Rica, in the Tilarán mountain range and has an area of 5,000 ha. It was created by CCT in 1972, initially with an area of 328 ha. This initial area has been growing over the years, through fundraising campaigns for acquiring land. Its primary objective is the conservation and protection of an unaltered expanse of tropical cloud forest. Education, research and nature-based tourism were identified since the start as secondary objectives.

Problems due to congestion

One year after its creation, the reserve opened its doors to tourists interested in observing nature. Slowly the reputation of the reserve as a natural destination grew and nature-based tourism increased. In 1992, the number of visitors rose to 50,000, a situation which provoked the need for regulating the number of visitors within the park.

This rapid growth (previous to the first regulation measures) was producing the following effects:

- Soil erosion on the trails, which were unsurfaced;
- Crowding of visitors at the entrance of the reserve, which was not prepared to receive such a high number of visitors (biggest crowding occurred at 8:00 AM, about one hour after the reserve opened to visitors – people had to stand in line for 2 or 3 hours);
- · Lack of management capacity (understaffing) to attend such a high number of visitors;

- Congestion of motorized vehicles at the reserve entrance, where there was no parking place;
- Decrease in the quality of the visit to the nature reserve, due to the increase in number of encounters among visitors along the trails;
- Excess of mud on the trail system.

Global approach

Policy

Main Objectives and planning

The critical moment as regards visitation occurred in 1991. Regulating the number of visitors to the Reserve was seen as something indispensable to maintain an appropriate quality of the visit within a natural area and also to minimize negative environmental impacts (and not because of lack of physical space for visitors).

Demand Management

The reserve managers turned to paid advertisements in the national newspaper announcing access restriction from 1992 on.

Destination Management

Opening of other nearby attractive sites for tourists.

Site management

- Better visitor control within the reserve:
- Many annoyed persons waiting several hours to enter the park;
- Improved visitor experience.

Specific measures and results obtained

Procedure

Measures related to accessibility and circulation

Access to the Reserve is mainly by car or coach. There is a small parking area at the entrance for this purpose. A keeper or custodian has been assigned to regulate access and vehicle parking, striving to use parking space in an optimal way. Since the gravel access road was in a very bad condition, due to the neglect of the public authorities, the last 3km before arriving at the park was upgraded and is regularly kept up by the Reserve Management.

Due to lack of open space (and to the decision of not cutting down forest trees) the parking area is not adequate and insufficient during peak days.

Measures related to entrance facilities and infrastructure:

- Parking areas for cars and buses were built;
- Entrance facilities were improved, providing refreshment stand and public washrooms;
- Staff for attending visitors was increased;
- Permanent improvement and maintenance of trail system within the forest;
- A modest kiosk for information and ecological interpretative purposes was originally built, which has now been replaced by a more formal visitor centre.

Booking and advance payment of entrance tickets

- No booking system is yet in place. Visitors can spend the whole day in the park; they may also enter in the morning and return in the afternoon, without paying another entrance fee;
- Option for booking groups through travel agencies is being considered, since this could help in foreseeing peak visitation dates and hours.

Visitor flow control measures within the site

- A regulation based on the LAC (Limits of Acceptable Change) approach, consisting mainly in allowing a maximum of 100 persons at the same time in the nature trail system of the reserve was enforced in 1992. In 2002, this limit was raised to 160 persons, thanks to the opening of new trails and the improvement of existing trails;
- The fixed maximum number of visitors at the same time within the park is distributed among
 four different entrance trails, each one with a different capacity. Once the park reaches this
 capacity, it is closed and a waiting list is put in place, so that when one visitor exits, one in
 the list enters. This specific situation happens only about 50 days a year;
- In order to count the number of visitors, a control booth has been placed at the trailhead entrance. A staff person keeps control of the number of persons that enter through each trail and is in charge of closing each trail when the number of visitors reaches the maximum allowed for each trail;
- Density has been limited on the different trails. For example, on one trail, which has a length
 of about 2km (and an average width of 1 m), a maximum of 30 persons at a time is permitted.
 On another trail, with roughly the same length but double the width, a maximum of 60
 persons is allowed;
- During peak visitation periods, additional staff is contracted and park rangers survey the trails, maintaining order and compliance with park regulations;
- To avoid congestion, the reserve now promotes early morning, afternoon, and night tours. The
 most popular tour (90% of visitors) is the morning tour, which begins at 7:30 AM. A tour at
 1:00 PM is offered, but there are very few visitors. The night tours are intended for
 appreciating nocturnal activity of the wildlife in the cloud forest (which varies very much
 from diurnal activity), but few people take this tour (an average of 6-8 per day).

Coherent communication policy

- Articles and advertisements in newspapers and magazines are regularly published, including
 restriction of visitation measures, information on visitation statistics, etc. Local sources of
 information frequently mention the restrictive measures, but usually in a negative way, in
 order to promote visits to other private sites nearby;
- There are two websites which provide much interesting information on the Monteverde Reserve and also on the conservation of Central American cloud forests: www.cct.or.cr www.cloudforestalive.org

Agreements with public authorities

• According to the reserve management, recently there has been a more open attitude on behalf of the local municipality, and collaborative agreements have been set up, especially as regards tourism issues. The Centre is providing technical assistance to the municipal authorities aimed at solving problems of increased tourism in the area (not within the Monteverde Preserve). This cooperation is permanent, since new tourism destinations are being opened every year in the region, spreading access to alternative sites increase the local economic benefit, but is also causing problems such as refuse, vehicular circulation, pollution, etc.

Collaboration with the local/international tourism industry

- During 2003, a local association for promoting the tourism attractions and maintaining the
 ecological integrity of the Monteverde area was set up, made up of ten different entities;
- The Reserve collaborates in different ways with the hospitality sector and with the National Institute of Tourism, and provides courtesy passes to distinguished visitors, both national and international;
- Courtesy entrance passes are also provided to tourism agencies (both outbound and inbound operators).

Consequences

For the local community

- Restricting the number of visitors per day to the Reserve has caused some problems among
 the local community, since hoteliers began to exert pressure for obtaining personal quotas for
 their respective businesses. This did not happen and there was general uneasiness;
- Even though local income increased through tourism, the basic public infrastructure (roads, sewage, etc.) had not or only very little been improved. Tourism infrastructure and facilities (hotels, restaurants, etc.) have been steadily improving over the years.

For the visitors

- Improved visitor experience;
- Opening of other nearby attractive sites for tourists.

Further steps

- Improvement of trail infrastructure to provide more resistance and added attractiveness to the visitors:
- Involvement in the training of a core of naturalist guides of the zone, in order to maximize visitor experience and help minimize negative environmental impacts;
- Improved information for the visitor, including required behaviour within the preserve;
- Option for booking groups through travel agencies, in order to have a better idea of expected number of visitors on a given date;
- Access road to the Monteverde reserve remains unsurfaced. There are plans for paving this road starting in 2005, but this process may take several years.

THE ALHAMBRA, GRANADA, SPAIN

Main source of information: Patronato de la Alhambra y Generalife.

Edited by: Jean-Louis Luxen

Location map





Identification

The Alhambra was listed as a World Heritage Site in 1984, and the Albaycin, as an extension, in 1994. Both sites form the medieval part of Granada. To the East of the Alhambra, the gardens of the Generalife are the former rural residence of the emirs who ruled this part of Spain in the XIII and XIV centuries.

The Alhambra is managed by the "Patronato de la Alhambra y Generalife", which is a public body with administrative and financial autonomy in the management of the site.

Problems due to congestion

Badly planned mass tourism, management marked by over-exploitation, and the absence of overall urban planning, all had very harmful consequences for the integrity and authenticity of the site, thereby compromising the quality of the visit:

- Alterations to the site and its environment damaged the urban and historic value of the Alhambra and its relation with its natural setting (access by car to the site itself, hotels, restaurants and shops too close to the site, nuisance parking etc.);
- Uncontrolled access of visitors with no regard for the carrying capacity of the site;
- A "mass tourism" effect on the site so that the dreadful conditions no longer allowed the visitor a valuable appreciation of the aesthetic and cultural value of the site, or of its historical significance
- Physical degradation of the site (palace, gardens, landscape, etc.);
- "Short stay" visit of the great majority of visitors, with no overnight stay in Granada.

Global approach

Policy

Main objectives and planning

Since 1995, a new model of the tourism management of the Alhambra has been based on the concepts of the carrying capacity of the site and the quality of the aesthetic experience of the visit. This move combines several elements:

- The visitor is the main reference for the management, in order to allow a pleasant and meaningful "heritage experience";
- Integrated conservation of the site in its entirety for the safeguard of the physical heritage and its authenticity;
- Presentation of the site as one element of a whole, in relation to the city and the surrounding landscape ("territory");
- Efforts are made to present and interpret the site by underlining its aesthetic, historic and environmental value.

Demand Management

- Participation in Tourism Fairs;
- Dissemination of leaflets to travel agencies explaining the new regulations.

Destination Management

- Efforts to spread the visitors to other interesting sites in the area;
- · Priority of access to visitors who stay overnight in Granada.

Site Management

- Congestion management is considered as part of the general management plan of the site;
- Decision to keep the maximum number of visitors at the level of 2 million, but with a better distribution over the year and the day.

Specific measures and results obtained:

Measures relating to accessibility and circulation

- Access by vehicle or coach by peripheral road to a welcome site (parking spaces, leisure area, ticket offices and service pavilion);
- A green zone (Cuesta de Gomérez) has thus been reclaimed as pedestrian access next to the other pedestrian walkways (Cuesta del Rey Chico et Cuesta del Realejo);
- Access to the site itself limited to public transport (taxis and shuttle services) in agreement with the Town Hall.

Measures relating to entrance facilities and infrastructure

- Construction of a car park for vehicles (630 spaces) and busses (60 spaces), based on the real
 carrying capacity;
- Service pavilion: reservation and purchase of tickets, information service, offer of audio guides and official publications, cafeteria, toilets;

- Facilities for disabled people;
- Interpretation centre and museum of the Alhambra.

Booking and advance payment of entrance tickets

• Since 1998, sale of tickets by a financial institution, by telephone or by Internet: 60% of tickets are sold this way, which allows the management of tourist flows at source.

Visitor flow control measures within the site

- More homogenous distribution of visitors within the site: 1/3 groups, 1/3 individuals, 1/3 educational visits;
- Limitation of the daily and annual capacity in the Nasrides Palaces, reducing admission from 400 persons to 300 persons per - hour, which represents a reduction in density from 3.44 m²/person to 5m²/person;
- Redistribution of visitors throughout the day by the establishment of:
 - Morning tickets (capacity: 4,200 persons);
 - Afternoon tickets (winter: 2,100 summer: 3,500 persons);
 - Evening tickets (2 admissions of 200 persons);
 - Separate tickets for garden visits (Generalife, Alcazaba, Partal).
- Organization of access to the Nasrides Palaces, via a system of limitation of length of stay:
 - Admission of 50 persons per 5 minutes;
 - Reduction of the number of 40 to 30 persons per group;
 - Alternation of group and individual visitor admissions;
 - No explanation by guides within the Palace.
- Redistribution of visitors by diversifying itineraries within the site:
 - "Official" itineraries: Alcazaba, Nasrides Palaces (timing), Generalife;
 - Alternative itinerares : walls (exterior, interior), for disabled people.

Communication policy

- Visitor management strategy: statistical study of visitors, educational approach;
- Dissemination of information about the conditions of access.

Agreement with public authorities

- The "Patronato" develops its action within the framework of a special contract with the public authorities:
- Coordination with the municipality of Granada for the promotion of tourism of the area as a whole.

Collaboration with the tourism industry

- Close cooperation with the representatives of the city's hotels and restaurants;
- Particular attention to the coach companies.

Consequences

For the local community

Economic benefits due to visitors distribution throughout the year.

For the visitors

• When they understand the need for access regulation, the visitors agree with a system which assures them a much better appreciation of the sites.

Further steps

- To become part of an overall tourism management plan for the region of Granada, integrating the Albaycin, the Cathedral, La Cartuja and other sites more than before. This would further improve the diversification of visitor flows, an improvement on the supply side and an increase in the total duration of stay within the city;
- Better information of the visitors about the necessities of conservation and the reasons for regulating visitor flows;
- Set up a regular visitor satisfaction evaluation system, in parallel with studies on the typology
 of visitors which is already carried out systematically, along with the visitor management
 strategy;
- Develop a new museum / interpretation centre.

SCHÖNBRUNN PALACE (AUSTRIA)

Main source of information: Dr Franz Sattlecker

Edited by: Dr. Franz Sattlecker

Location Map and Site Map:





Identification

Schönbrunn Palace is one of the most important cultural monuments in Austria and since the 1960s has also been one of the major tourist attractions in Vienna. Soon after the end of the monarchy the citizens of Vienna discovered the park as an attractive recreational area. Eventually, the palace was also opened to the public, drawing around 1.5 million visitors annually. The park and all the other attractions at Schönbrunn together see a further 5.2 million visitors each year, giving a grand total of 6.7 million visitors to the imposing palace complex each year.

In 1996, Schönbrunn Palace was placed on the list of UNESCO World Cultural Heritage Sites. Inclusion in this list confirms the importance of the palace and its gardens as a Baroque work of art

Problems due to congestion

Problems due to congestion arise in the State Rooms on the 1st floor of the main building of the palace, where visitors can tour 40 of the rooms once occupied by the imperial family. Depending on the season, the palace can see upwards of 10,000 visitors each day. As space in these rooms is limited and excessive visitor numbers could pose a serious security risk in the event of an emergency, steps had to be taken to limit the number of visitors in the rooms at any one time.

Global approach

Policy

The aim of the Schloß Schönbrunn Kultur- und Betriebsgesellschaftm.b.H. is to preserve and present the site in an authentic manner and to render it accessible for culture, tourism and leisure.

Main objectives and planning

The management of the World Heritage Site is service orientated according to different demands of local and international interest groups.

Benefits are primarly used for preservation and conservation. The best possible protection is therefore the main line in all actors taken on site.

Specific measures and results obtained

Procedure

Organizational set-up

 In October 1992, the Schloß Schönbrunn Kultur- und Betriebsgesellschaftm.b.H. (Schönbrunn Cultural Organization and Operating Company Ltd.) took over administration of the palace building from the former palace authorities. Schönbrunn Palace is still under the ownership of the Republic of Austria but is now administered and serviced by a federally-owned company which operates on a private enterprise basis and is therefore much more flexible.

Measures relating to accessibility and circulation

An underground station, as well as numerous other public transports are close to the site.

Measures related to admission facilities and infrastructure

- Opposite to the entrance is a car and coach park;
- In 1994, the Main Hall on the ground floor of the palace was adapted and redesigned as a
 functional entrance and welcome area for visitors to the palace. Visitors to Schönbrunn
 Palace were then able to make use of modern infrastructure (ticket desks, information point,
 cloakrooms, etc.).

Booking and advance purchase of admission tickets

- Visitors to Schönbrunn Palace are divided into two groups. 50% are individual travellers, while the other 50% come in groups accompanied by a local tourist guide;
- Groups can only visit with advance reservations. This reservation can either be made by the local tourist guide or the travel company;
- Reservations can be made by phone, fax or directly using our website (www.schoenbrunn.at).
 If the reservation was made directly using our website each registered customer has his or her own personal identification number (PIN code);
- Individual customers can also make reservations via our call centre or the Internet.

Visitor flow control measures on site

 Ticketing is controlled by a computer programme that calculates the maximum number of visitors permitted in the 40 rooms on the first floor of the palace. This is called the "autopilot";

- All the reservations made by groups and individuals are totalled and compared with the maximum permitted number of people in the palace within the next hour (i.e. from the time of calculation);
- For example, if the permitted number of visitors within the rooms is 1000 per hour and the
 pre-booked tickets (groups and individuals) amount to 600, there would then be 400 tickets
 left to sell to individuals without advance reservations within the hour;
- If the maximum number of visitors is exceeded, people without reservations are given a waiting time which is automatically printed on their tickets as their allocated time of admission.

Communication policy

To make visits to Schönbrunn Palace as pleasant as possible for our international visitors we
publicize our reservation options, in particular in travel guides, which in our experience
represent the primary information source used by visitors to Vienna. In addition, we
collaborate with the Vienna Tourist Information and our partner hotels in the city.

Collaboration with the local / international tourism industry

 The main partners for communication and collaboration are the Vienna Tourist Board, the National Tourist Organization of Austria and not least the local and international travel agencies who send their travel groups to Schönbrunn Palace. Furthermore, the Vienna-Hotels collaborate through promoting packages including visits to Schönbrunn.

Consequences

For visitors

- Compared to the situation ten years ago, visitors to Schönbrunn Palace are now offered a ticket reservation service admitting them to the palace at a specific time;
- Visitors who choose not to make use of the advance reservation system are allocated a specific time of admission which is printed on their tickets;
- Unnecessary waiting times have been eliminated and our customers are free to use the time prior to admission for visiting the palace gardens or other attractions within the palace grounds.

Further steps

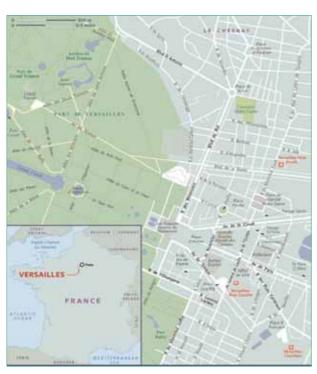
- A new visitor centre and underground parking are planned in collaboration with the city of Vienna and the Republic of Austria;
- The experience of the past few years has resulted in measures to improve and optimize our reservation and autopilot system, starting from April 2004;
- The waiting area downstairs will be optimized for waiting groups and individuals by the provision of historical information to make the time spent waiting more interesting;
- In future, sanctions will be imposed on no-shows as well as on groups arriving after their allotted time slot;
- We will continue to adapt the reservation mask in our system to accommodate the need to avoid delays arising from the three tours of the palace offered;
- In addition, information for our individual customers in the main hall (where the ticket desks
 are located) will be improved to make the decision as to which ticket to purchase easier for
 the visitor, thus reducing the time taken by each ticket sale as well as waiting times at the
 ticket desks.

DOMAIN OF VERSAILLES (FRANCE)

Main source of information: Service Développement et Diffusion du Château de Versailles

Editor: Anya Diekmann

Location Map



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Identification

Ancient hunting pavilion built by Louis XIII, it had been restored and enlarged by Louis XIV from 1660 until 1710. In 1682, the palace becomes the official site of the royal court and the government. The domain includes different parks and gardens as well as different buildings, such as the main palace, the Petit Trianon, the Museum of French History and the Parliamentary Museum.

Nowadays, about 7 million people (2.5 million of whom visit the palace) visit the domain and the palace each year, with seasonal peaks in the summer period.

The Domain of Versailles, a UNESCO World Heritage Site, was awarded the status of an administrative public building in 1995, when it was placed under the supervision of the Ministry of Culture. Notably, this status provides the Domain with managerial autonomy, allowing it to carry out major restoration work and to improve public access.

Over 70% of the annual budget comes from the own Domain incomes and less than 30% from the State.

Problems due to congestion

- Because the visitor number for the palace is limited, long queuing for entering the palace (up to two hours) and uncomfortable conditions of visit;
- The present system of 6 separate visitor entrances to the palace is too complex. Most visitors enter
 the palace through secondary accesses or entrances created in modern times, as in the case of the
 main entrance (Entrance A) located on the site of the former north passage leading to the gardens;
- Site degradation due to the constant flow of visitors in spaces that were not originally shaped and built for a mass tourism purpose.

Global approach

Main objectives and planning

Additionally to the already existent measures of visitor flow management, a new "schéma directeur" will be adopted within the next five years in order to respond to the steadily increasing visitor numbers and to foster a satisfying experience for the visitor.

Specific measures and results obtained

Measures related to accessibility and circulation

- Parking facilities: Six different car parks are available. These car parks are managed by the city
 or the Domain itself who both charge a parking fee;
- Though visitors can enter the Park by car, an increasing number of areas are reserved to
 pedestrian circulation. To discover the Park then, visitors can use the transport facilities, such
 as little trains (everyday, 2 circuits with commentary and music) and carriages (several
 circuits), or rent a bicycle;.
- Disabled people: The Château of Versailles applies special reception, visit and entrance fee
 conditions for disabled visitors and proposes guided tour circuits adapted to the different
 categories of disability. A priority access has been opened, served by a lift, and vehicles
 transporting wheelchair-bound visitors are authorized to enter the main courtyard and
 proceed to this special entrance.

Measures related to entrance facilities and infrastructure

- Visitors can buy a "passport" allowing them to spend an entire day at the Domain giving them access to all chargeable parts of the site without additional queuing as well as to the Grandes Eaux Musiciales show and the temporary exhibitions;
- Increasing development of a range of coherent services such as catering (restaurants, snack bars and several take-away points), shopping and banking.

Booking and advance payment of entrance tickets

- Visitors can book their tickets in advance on site, by phone, Internet and train stations (indeed
 the Château of Versailles leisure package comprising a one-day pass and return train ticket is
 on sale at ticket offices in over 300 stations in the Paris region);
- Different pay desks are available on site for purchasing the entrance ticket.

Visitor flow control measures within the site

- 2,200 visitors are allowed into the palace each hour;
- Different itineraries are proposed within the palace in order to distribute to the public;
- In order to limit the number of visitors located in certain spaces at the same time, audioguides are distributed to visitors. This helps controlling the duration of the visit and stopping visitors arrivals when there are no more audioguides left.

Communication policy:

- Brochures detailing the various activities available inside the Domain are published every season:
 - "Discovering Versailles" presenting the cultural season;
 - The programmes for the Grandes Eaux Musicales and the Fêtes de Nuit;
 - Teaching aids: provided to teachers; these packs help them to prepare their pupils' visits;
 - Orientation guide and the map of the Domain, available in 6 and 8 languages respectively;
 - Internet site (www.chateauversailles.fr) providing essential information about the regulation of the visits, for preparing and prolonging the visit, and also having a new educational section:
 - Co-productions (multimedia and audiovisual);
 - Leaflets (in 6 languages), disseminated through Tourism Fairs and travel agencies.

Agreements with public Authorities

- As the town of Versailles was founded in 1671, at the desire of King Louis XIV, around the Domain, cooperation between the city and the estate has long proved its efficiency;
- Nowadays, cooperation is mostly oriented towards educational programmes with local schools, organization and financing of events and shows, and the coordination of public transports.

Collaboration with the tourism local/international industry

- The Office de Tourisme welcomes and informs visitors, and an interactive screen in the Office window gives information about the town 24h/day and 7 days/week. The Office is also the link between the Domain and the numerous businesses located in the city of Versailles, such as hotels (over 1000 guestrooms) and restaurants;
- The Château also works on many promotional operations every year with the Versailles Convention Centre, the Yvelines Department Tourism Committee and the Paris Ile-de-France Regional Tourism Committee.

Consequences

As the Palace is mostly visited by people from abroad (71%), most restrictions concerning the local community have been carried out in the Park: restriction of the circulation of cars, barriers to guide visitors through restored areas (and away from statues) and reinforcement of the security system.

These measures, after causing surprise among the local population, are now being respected by most people, who are beginning to see the Park as a "natural museum" and no longer as a simple garden.

Further steps

- Important restoration is currently in progress. Namely, the creation of a new reception area
 where the visitor purchases his ticket and receives some information about the site. The "royal
 grille" of the XVIII century will be restored for that purpose and be the entrance space for this
 new reception area;
- The future system will be simple and comprehensible to everyone. Visitors will enter the
 palace through two entrances only: the Gabriel Pavilion to the North (for groups only) and
 its South pendant, the Dufour Pavilion (for individuals only);
- These new tour circuits starting and ending in the Royal Courtyard will respect the palace's
 historical and architectural coherence more closely by as far as possible following the logical
 sequence of the apartments. They will allow à la carte visits with more frequent possibilities
 for rest and recuperation, thereby encouraging visitors to utilize the new services installed
 around the Royal Courtyard;
- This new system will allow a better spread of visitors throughout the palace and will take peaktime pressure off the two main tour circuits on the first floor of the central part of the building;
- Modification of the itineraries allowing up to 2,600 visitors /hour in the palace by shortening and multiplying them at the same time;
- The Palace and Estate of Versailles management authority has drawn up a master plan for upgrading safety standards in the palace; implementation of this plan is one of the priorities of the Greater Versailles project;
- Disabled people: as the present facilities are far from satisfactory, additional lifts are to be installed in the Old Wing, the South Wing, the central part of the palace and the North Wing.

THE HISTORIC CITY OF KAIROUAN (TUNISIA)

Main source of information: Doctor Mourad Rammah, Curator of the medina of Kairouan, Director of the Association for Safeguard of the Medina

Edited by: Valéry Patin

Location map



Identification

The city of Kairouan, in Tunisia, is one of the most important Holy Cities of Islam. Listed as a World Heritage Site, it is located at 60 kms from the famous sea resorts Sousse and Monastir and 100 kms off Tunis. The site is managed by the National Agency for Enhancement and Promotion of Cultural Heritage for the monument and the Association for the Safeguard of the Medina for the historic centre. Kairouan receives more than 300,000 paying visitors per year.

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Problems due to congestion

- Difficulty to organize the visit of the site including three main monuments and the medina;
- Congestion around the Old Mosque due partially to the fact that the site is closed for non-muslim visitors during the afternoon and thus all visits have to take place in the morning;
- Degradation of the site.

Global approach

Policy

Main objectives and planning

Different measures have been undertaken in cooperation between the public and private partners: The Agency for enhancement and promotion of Cultural Heritage and the National Heritage Institute, as public authorities and, for the local population represented by the Association for

Safeguard of the Medina, numerous associations and private operators (new hotel in the Kasba for example). Large part of the actions are conceived and realized with the aim of responding to the tourists behaviour and needs. The management of tourist flows is profitable, at the same time, to the local population and to the foreign visitors,

Destination management

- The tourist can visit the main monuments located in the city with the same ticket;
- The cooperation between public and private sectors (cultural and tourist sector) is permanently improved.

Site management

 The main streets of the medina have been restored to improve the management of local and tourist circulation in the historic city and propose to the visitors an interesting and complete circuit to discover the site.

Specific measures and results obtained

Procedure

Measures related to accessibility and circulation

The visitors arriving on the site by bus or individual cars are oriented (by signage) to an information point located at the entry of the historic city. It is an ancient tower belonging to the Aglabide pond area (built during the IX century).

Measures related to entrance facilities and infrastructure

The visitor can go up to the roof of this tower. From this terrace he has a large view of the city allowing him to identify the components of the historic area (Mosques, medina, Kasba).

Booking and advance payment of entrance tickets

There is no advanced booking. In order to gain time, the visitor purchases in the same reception point a pass allowing him to enter all monuments of the city.

This solution avoids congestion in front of each monument. This organization is possible because all the sites are managed by the same public company, which is the Agency for Enhancement and Promotion of Cultural Heritage.

Visitor flow control measures within the site

The visitor is guided by signage or guides through the city in a fixed itinerary. The visit begins by the Barber Mosque, an important sanctuary (built during the 17th century) with very active Koranic schools. There are no problems of congestion because the site is structured in large opened courtyards. The visit continues with the Great Mosque (built in the middle of the IX century) which is the oldest Islamic religious site in Occident. This site is only partially accessible for non-muslim visitors. The tourist can visit the courtyard, but only during the morning. An interpretation centre provides detailed information and insights of the old mosque.

Just at the corner of the interpretation centre, the visitor is guided to the entry of the medina (historic centre) where the main streets and important monuments have been restored and signalled with the aim to reinforce the circulation of the tourists and the local population.

Collaboration with the local/international tourism industry

The main actor in this part of the city is the Association for Safeguard of the Medina which provides a legal, technical and financial support in the action of protection and enhancement of the site. Its intervention consists in restoring private houses, religious and civil monuments in consultation with private owners. For example, the Kasba of Kairouan has been recently transformed in a very attractive and charming hotel built with the technical assistance of the Association for Safeguard of the Medina.

Consequences

For the local community

- There is no concentration of visitors close and inside the religious site. The risk of confrontation between tourist use and religious use is strictly controlled;
- The distribution of visitors in the city is a real advantage for local trade and tourist activities;
- The economic impact of tourism is a motivation for some local people (trades, artcraft) to stay
 in the old city;
- For the local population, it is easier to use the restored street for the necessities of daily life, to live in restored houses and to use ancient monuments restored and dedicated to administrative and cultural functions.

Further steps

New interpretation centre: the Tunisian cultural authorities are going to create, with the
World Bank assistance, an interpretation centre dedicated to the Great Mosque located in
front of it. In this centre, visitors will see drawings, photographs, reconstitution, scale model,
historic explanations about the mosque and comes up to the terrace where they can see part
of the interior of the Great Mosque courtyard. Surely, it is not the same thing as a real visit to
the monument, but it is a better option for visitors arriving in front of a closed site.

GALÁPAGOS ISLANDS - ECUADOR

Main source of information: Mr. David Parra Bozzano, ecotourism specialist - Quito, Ecuador (information provided in August-October 2003).

Edited by: Héctor Ceballos-Lascuráin

Site map



Identification

The Galapagos Islands are part of the Republic of Ecuador. They are comprised of a National Park (Galapagos National Park, GNP, created in 1959), which covers 97 % of the land area and was declared a World Heritage Site by UNESCO in 1978, and by an area of Marine Reserve surrounding the archipelago (Galapagos Marine Reserve, GMR, created in 1997), which was also included in the World Heritage listing in 2001.

Management of both protected areas (GNP and GMR) is the responsibility of the Ministry of the Environment (Ministerio del Ambiente) of Ecuador, through the Direction of the National Park, a public institution which has management and financial autonomy and also the institutional and scientific support of the Charles Darwin Foundation and other environmental NGOs.

Organized ecotourism in the Galapagos began in the late 1960s, when two Ecuadorean companies headquartered in Quito, Metropolitan Touring and Turismundial, joined with a New York company, Lindblad Tours, and purchased two cruise boats, a twelve-passenger sailing vessel and a sixty-passenger luxury liner. Today, the Galapagos Islands are among the best known ecotourism destinations of the world and are considered as the crown jewel of the Ecuadorean natural park system. Number of visitors to the islands has grown from 4,500 in 1969, to 17,445 in 1980, to 61,895 in 1996, to 82,226 in 2002.

Problems due to congestion

Permanent pressure due to the rise in tourism is the main threat to the conservation of the priceless natural resources of the islands. As an induced effect, population growth of a migratory nature generates multiple problems of negative environmental impact on the insular ecosystems and is a constant menace to the stability of the islands' natural environment, which is characterized by a notable singularity, high endemism and extreme fragility.

Some indicators of the present situation of the Galapagos Islands are the following

- High rates of human population growth and disorderly urban expansion, due mainly to migration;
- Tourist congestion in main visitor areas, due to a lack of control in carrying capacity and also planning of circuits and itineraries of tourist vessels;

- Granting of expanded flight frequencies and expansion of the installed physical facilities on land and in tourist boats;
- Deterioration in the quality of tourism operations, as regards level of visitor satisfaction and also visitor management and nature resource conservation, which is the base of the tourism product;
- Environmental pollution due to urban refuse and waste generated by tourism operation, especially in the five humanly populated islands and their zones of influence;
- Limited participation of the local communities in the benefits of tourism, as a result of the dominance of firms based on the mainland in marketing and operation of tourism activities;
- A high cost of living, which affects the resident population of the archipelago, as a consequence of tourism development;
- Meagre effects of economic reinvestment for improving living conditions of local inhabitants, reflecting in the low quality of infrastructure and public services and limited social care;
- Politicking in the management of the protected areas and insular administration, which
 relegates conservation principles and practices to the benefit of short term socio-economic
 considerations.

Global approach

Policy

Main objectives and planning

Ever since organized tours to the Galapagos Islands began in 1968, they were based on careful planning that defined sites to be visited, type of tourism chosen (nature-based, low-impact tourism, offered mainly to foreigners), and cruise ship itineraries. In 1974, the first Management Plan was written up and, since then, control and monitoring of tourism activities have been carried out. The current version that is in force is the updated Management Plan of 1997, which included a study on tourism carrying capacity.

The tourism model that has been implemented, which is quite strict and is monitored and controlled by the Ministry of the Environment, is characterized by the following features:

Site management

- Subjection of human activities to prescriptions contained in Management Plans of the National Park and the Marine Reserve;
- Highest priority given to natural resource conservation actions;
- Legal exception support, sustained by the Special Regime Law for the Conservation and Sustainable Development of the Galapagos Islands;
- Integrated and coordinated management system of zones with specific and different objectives, authorized uses and rules to respect: absolute protection zone, primitive zone, specific-use zones, visitors zone, port and protected adjoining zone, rural and urban zone;
- Visitor access control and requirement of access tax payment. Entrance fee for foreigners is more expensive than for Ecuadoreans;
- Authorization of tourist visitation limited to 69 terrestrial sites and 62 marine sites defined in Management Plans of both protected areas;
- Compulsory registration of Operation Certificate (Patente de Operación) issued by the Ministry of the Environment and annual Operational Permit issued by the Ministry of Tourism;

- Limited quota for tour operators, subjected to indicators of defined carrying capacity;
- System of nature guides ("guías intérpretes") specialized in the Galapagos Islands, who are responsible for supporting the monitoring procedure of visits;
- Regulations on the types of authorized tourism operations, with compulsory observance in order to avoid revocation of authorizations;
- A tourism product characterized by the experience of visiting unaltered natural areas, based on environmental interpretation provided by qualified naturalist guides.

Specific measures and results obtained

Measures related to accessibility and circulation

- Visitor access is exclusively from the mainland, by air, using two airports located in humanly inhabited islands:
- Itineraries are solely authorized for tourists departing from humanly populated areas towards specific visitor sites, following authorized visit programmes;
- Transfers take place almost totally by sea and through organized package tours, with compulsory qualified guides certified by the Ministry of the Environment;
- The majority of tourism packages are by sea vessel ("navigable tour").

Measures related to entrance facilities and infrastructure

- At the two airports, reception centres have been provided and strict visitor access control is carried out there;
- At three ports located in the humanly inhabited islands, environmental interpretative centres have been set up, as well as facilities for visitors, such as nature trails, signposting, etc.

Booking and advance payment of entrance tickets

- Access authorization by means of payment of entry tax;
- Visitor access cards to Galapagos National Park are available at authorized travel agencies, at outgoing airports and also at reception centres;
- Reservation at travel agencies in the mainland (mainly Quito and Guayaquil) of package tours operated by authorized tour operators.

Visitor flow control measures within the park

- Inspection and quarantine procedure at embarkation ports and at reception and control centres in humanly populated islands;
- Scheduling of itineraries subjected to approval of the National Park Directorate in function of estimated carrying capacity;
- Sea vessels have a specified passenger quota according to their qualification and their operational register patent. The maximum authorized capacity is 100 passengers (for the larger vessels). 70 vessels with a total capacity of 1,632 passengers operated in the year 2002. 43 % of passengers were transported in vessels with a capacity of 17 or under;
- The Directorate of the Galapagos National Park keeps a detailed system of visitor registration, supported by a data base which is kept permanently updated;
- Docks, staircases, viewpoints, interpretative trails and other facilities for handling tourists have been provided at the sites authorized for visits.

Diversification of itineraries:

- Fixed itineraries of major tourist vessels (cruise ship-type) are approved on a yearly basis, with
 a more flexible approach in the case of smaller vessels. Only those vessels with a capacity
 under 20 passengers are allowed to modify their itineraries, with prior authorization);
- Only prior to justification and approval from the National Park Directorate is it possible to
 modify fixed itineraries, with strict limits according to the Carrying Capacity Study in those
 sites more frequently and heavily visited. The five visitor sites with higher visitation pressure
 are: Garrapatero (Santa Cruz), Punta Cormorant (Floreana), Plaza Sur, Bartolomé and Punta
 Suárez (Española).

Communication policy:

- The Ministry of the Environment maintains ample and updated specialized information coverage in the different mass media on the mainland;
- Different types of information related to principles of conservation and management of island resources are periodically distributed among the different levels of public administration and also the private sector.

Agreements with municipal authorities

In accordance with the Special Regime Law for the Conservation and Sustainable Development of the Galapagos Province (drawn up in March 1998), the three municipalities receive part of the revenues generated by the tourism entrance fee to the Galapagos National Park. In order to be entitled to a share of these revenues, the municipalities must propose projects that guarantee a contribution to sustainable development and must demonstrate that they have appropriate mechanisms for impact control.

Collaboration with the local / international tourism industry

No collaborative agreements have been formally established with the tourism industry. However, those tourism enterprises which have a major participation in tours to the Islands carry out contributions for socially oriented activities (prizes, community incentives, etc.) or for periodical health support (special medical attention brigades). Also, foundations by which the tourism companies carry out activities to improve the quality of life of the local communities, have been set up. The Galapagos Provincial Chamber of Tourism (a pilot project funded by IDB – the InterAmerican Development Bank) supports training and citizen awareness programmes in order to improve conditions of the tourism offer to the Islands.

Consequences

For the local community

Establishment of limits to the growth of the tourism supply as a consequence of the management model of the Galapagos National Park and the Galapagos Marine Reserve, is perceived as a restrictive factor by the local inhabitants, who aspire to have a greater participation in the tourism business.

For the visitor:

- Improved visitor experience;
- Visit limitation within the visitors zone.

Further steps

- There are plans for carrying out periodical training (every two years) among the naturalist guides, with special emphasis on knowledge and conservation of marine resources;
- A training programme for managers and public officers of the three municipalities of the humanly populated islands, on sustainable tourism management, is also being planned;
- There is constant encouragment for technological improvement and modernization ("clean technologies") in tourism vessels and tourism facilities on-land;
- There are plans for improving and expanding the interpretative centres at Santa Cruz and Isabela islands;
- Broadening of the coverage of sustainable tourism certification is envisioned, since at present
 this certification procedure is restricted to a reduced number of the larger vessels (the idea is
 to regulate vessels of all sizes and categories and also tourism facilities on land);
- Implementation of a statistical system for measuring visitor satisfaction and for defining visitor profiles is envisioned.

POINT PELEE NATIONAL PARK (CANADA)

Main source of information: Claire Mc Neil

Edited by: Anya Diekmann

Location map



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Identification

Point Pelee National Park of Canada is one of Canada's smallest national parks (only 15 square kilometres in size) as well as one of the most popular, due in part to its recognition as one of the best inland locations in North America to view migratory birds. Established in 1918, the park is located on the southernmost point of mainland Canada. The Pelee peninsula, which juts out into Lake Erie, is a stopover point for many shorebirds and waterfowl travelling along the Atlantic and Mississippi flyways. More than 370 species of birds have been recorded in the park birding area, including many songbirds. The park, which includes diverse habitats such as forests, beaches, open fields and an extensive freshwater marsh, contains (Carolinian) species, many of which are rare or "at-risk" in Canada.

When the park was originally established, much of the land within the park boundary was privately owned. By the mid 1930s, facilities in the park included roadways, parking lots, bath houses, pavilions, and picnic grounds serving 250,000 visitors annually. Cottages and hotels were located within the park.

Problems due to congestion

Environmental impacts related to visitor use included removal of vegetation, as campers cleared brush to tidy their tent sites, and a proliferation of informal trails leading from roads to the beach.

As car use increased over time, Point Pelee became heavily congested by visitor use, with some 781,000 visitors by 1963, with parking space for more than 6,000 vehicles.

The heavy visitor use within a small and sensitive area resulted in impairment of ecosystem health.

Particular congestion problems are associated with the spring bird migration, which averaged approximately 60,000 visitors from 1999-2003 during the month of May. The fall migration, while also impressive, receives less intensive use, averaging 33,342 during the month of September over the same 5-year period. Annual visitation is over 300,000 for the small park, whose land base is a meagre 5 square kilometres (the marsh area is fully two thirds of the park's size).

Global approach

During the 1960s and 1970s, programmes to restore park ecosystem health and control visitor use were initiated. Private land holdings within the park were purchased and cottages removed. Natural vegetation was restored to sites. Overnight camping facilities were removed in favour of a "day use" experience. The emphasis on minimizing the impacts of human use has continued to be the main priority in management decisions.

Specific measures and results obtained

Measures related to accessibility and circulation

A public transit system was developed to reduce vehicle use and the need for extensive parking lots.

 The park also identified a need to define a comprehensive pedestrian circulation plan for Point Pelee to deal with the proliferation of informal trails which were damaging park resources, and to provide a trail system that would introduce visitors to the park's features.

Measures related to entrance facilities and infrastructure:

- To manage the influx of visitors, during the peak season, from April to October, the extremely
 popular "Tip" area of the park is only accessible by a free (wheelchair accessible) shuttle
 service from the Visitor Centre;
- As an additional means to control congestion, the park closes its gates to vehicles once
 parking spots are full. Visitors can still choose to walk into the park (roughly a 10km walk
 from the entrance gate to the Tip).

Visitor flow control measures within the site:

- To manage birdwatching activities, which require direct observation of species and can result
 in a lot of off-trail damage by birdwatchers seeking out the best possible viewing experience,
 the park has developed several strategies;
- Over many years, the park has worked to develop a use ethic among visitors Park
 publications remind visitors to stay on existing trail and boardwalks and highlight the park's
 efforts to restore lost natural habitat. The result has been a self-policed policy of conscientious
 trail use:
- The park also produces a "Birding Map," essentially a pamphlet-style map of the park that outlines trail locations and describes the range of trail types available: road; surfaced trail (crushed gravel and boardwalk); footpath (unsurfaced), and seasonal birding footpath. These seasonal footpaths have been created to provide birders the opportunity to access habitat to view birds off the main trail, while at the same time isolating use into specific corridors instead of widespread informal use and resultant trampling of vegetation. Marked with temporary trail markers, the footpaths are only open seasonally and are rotated to promote re-growth of vegetation. The seasonal footpaths are not surfaced or cleared except to remove dangerous overhangs, and large groups are encouraged to stay on other trail types. This range of viewing opportunities allows dispersal of birders within the park boundary while minimizing damage;
- The park "Birding Map" pamphlet also provides an area map with alternative locations outside of the park for bird viewing along with a description of habitat type and birds likely to be seen.

Communication policy:

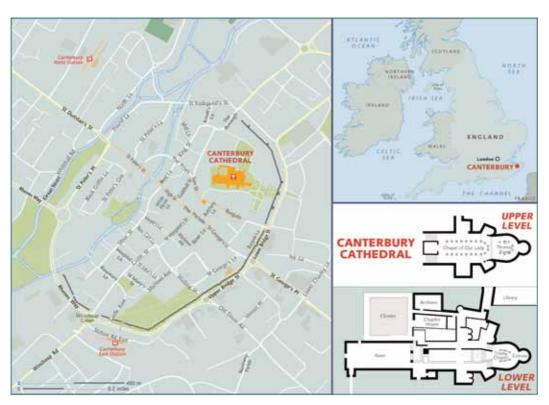
The park has also undertaken some marketing to encourage people to visit during fall migration as an alternative to spring migration.

• The park markets other birding opportunities in the region through Hot Spot County Bus Tours in May, a guided two-hour tour of nearby bird watching "jewels".

CANTERBURY CATHEDRAL, UNITED KINGDOM

Editor: Canon Peter Brett, Responsible for Visitor Management 1983-2001

Location map



Reproduced with permission from Lonely Planet Publications

Identification

The Cathedral and Metropolitical Church of Christ Canterbury was inscribed, along with St. Augustine's Abbey and St. Martin's Church, as a World Heritage Site in 1988.

As a Christian site it dates back to the time of the Roman occupation of Britain. Since the arrival of the Augustinian mission to Kent in 597 AD. the Cathedral has been the seat of the Archbishop of Canterbury, the Primate of All England.

The present architecture comprises work from the XI to the XV centuries, and the church sits in its own Precincts, defined by the Benedictine community, of which it was home from the X to the XVI centuries.

The site is in the care of The Chapter of Canterbury, within The Church of England, and is self-funding.

Problems due to congestion

In the late 1970s and early 1980s the number of visitors had reached unmanageable proportions and amounted to some 2.3 million per year. Capacity had clearly been reached - indeed exceeded - and overcrowding and congestion had become a serious problem. Some VIII century experience of dealing with pilgrims, coming to the shrine of St Thomas Becket, had been well and truly overtaken.

- The interests of the daily worship of the Foundation came into conflict with unrelenting masses of people seeking entry as visitors, and crowding into the building and Precincts;
- The quality of experience for those who came was seriously compromised and resentments built up;
- There was no control of movement within the building or the Precincts, and noise levels reached unacceptable proportions;
- The behaviour of young people, in the Precincts as well as the Church, became a significant problem and a matter of general complaint;
- That the place was overloaded as never before in its history was made evident from wear and tear
 on the floors, and damage to ancient wallpaintings from human breath;
- As a major national and international visitor attraction, the Cathedral drew such numbers as the
 infrastructure of the city was not able to cope with. Local people, shop-keepers and residents
 bitterly complained. Car and coach parking were inadequate.

Global approach

Policy

Main objectives and planning

In the mid-1980s a strategy for visitor management was formed. Its basis was the Benedictine ideal of welcoming the visitor into the community. This meant a complete change in attitude on the part of Cathedral staff and all involved.

This quickly established the second basic principle that control is best exercised by warmth of welcome and good standards of care, rather than by the negative attitude of confrontational policing.

Specific measures

Advanced booking

Streamlined and more efficient booking systems added considerably to control of numbers coming to the Cathedral. Groups could not just turn up and expect entry without prior arrangements. This enabled prior information to be sent out with respect to behaviour and restrictions.

Access

In 1995 the Chapter decided that, in the face of increased financial demands, a modest entry charge for visitors should be introduced. This gave the opportunity for the main entry point for visitors to be moved back to its original medieval position at Christ Church Gate - the entrance to the Precincts. The effect was dramatic. Movement and behaviour in the Precincts - as well as in the Cathedral itself - was immediately improved. A new outside staff, aptly called Shepherds, were put in place.

Measures to control visitor flow

 A particular problem in spiritual sites is that people justifiably expect to wander freely and sometimes wish to spend time at holy places. Resentments are quick to build up if any kind of fierce devices are imposed to control direction or speed up the flow. Even so, it was the establishing of a Visitor Route that proved to be one of the most important factors in answering our problems. This route was not only made applicable to visitors, Every guide-book, leaflet, children's work-book, and publication, had to be brought into line. Work with groups and tours had to be reorientated;

- Careful, gentle signage had to be put in place. All of this proved a considerable task not least in converting the attitudes of staff, many of whom were set in their ways. The final result was a consistent flow, without clashes of groups with different interests moving in contrary directions. Even so, because of the nature of the building one cross-over point had to be accepted. We left this alone and it coped with itself;
- Staffing arrangements had to be completely reviewed and new categories fanned. Welcomers
 were recruited to meet people on arrival inside the Cathedral door. The Welcomers were
 supported by Assistants. The Assistants walk about in the building freely, ready to answer
 questions or deal with problems. They are also ready to ease the movement of people at
 crowded times. Together with the existing Chaplains and Group Guides, these two new
 categories increased the staffing presence in the cathedral considerably. This had a dramatic
 influence on noise levels and behaviour;
- A comprehensive and demanding training scheme was begun for all staff associated with visitor management;
- Over the course of time signs and notices had multiplied to ridiculous numbers. Some even
 contradicted each other! A complete review was undertaken and all signs and notices were
 brought into a disciplined system of those which are directional, those which are informative
 and those which are just labels. A fundamental principle applied to this review was the
 reduction of signs to an absolute minimum and their content to as few words as possible, on
 the understanding that the place for extended information was in the guide-books and not on
 notices most of which were so crammed with words and information as to defy anyone's
 proper attention;
- The effect of these measures was considerable in relieving congestion. Not only did people
 move on more quickly, but they spent more time looking at the objects rather than reading
 long explanations of them;
- There were places where visitor flow inevitably continued to cause problems: e.g. Holy
 Places within the cathedral, and where the route had an unavoidable crossing point. We
 found that the less one tried to interfere, and the more things were quietly left to sort
 themselves out, the problems solved themselves. The principle applied was to enable rather
 than direct;
- Included in the new arrangements was consideration of facilities for disabled people. Where
 access arrangements and informative literature were improved, movement and congestion
 was eased. A Touch and Hearing provision for blind people gave great customer satisfaction;
- In 2001 the new *International Study Centre* was opened in the precincts. This is a residential, educational and conference centre which extends the work of the Cathedral into immense, new possibilities. Such a place gives a new dimension to visitor care and plays its part in relieving pressures of visitor interest.

Consequences

The formation of the *Canterbury City Centre Initiative* brought together the Local Authority, Local Traders, Residents, Hoteliers, Police and other interests into a body that applied itself to issues concerning visitors to Canterbury. Siting of car and coach parks, meeting and greeting of groups, city signage and general facilities, were all considered and many improvements made. A *City Centre Manager* was appointed to be the day by day officer of the committee.

WIELICZKA SALT MINE, POLAND

Main source of information: Janusz Kobylecki, Wojciech Jakubiak. Wieliczka Salt Mine Management Department (March 2004)

Edited by: Jolanta Sroczyńska

Location map



Map of Wieliczka



Identification

In Kracow's proximate vicinity, 14km south-east from the city centre, lies the town of Wieliczka, with a population of 20,000. Wieliczka is famous for having the oldest operational salt mine in Europe (over 700 years).

Since 1978, the mine is on the UNESCO's list of World Heritage Cultural properties.

The tourist route open to visitors is only a small fraction of the entire mine. The mine includes 7.5 million square meters of post-excavation space on nine levels, each between 64 and 327 meters. The tourist route extends to level three only - to the depth of 135 meters. During a two-and-a-half hour tour, visitors walk the underground distance of approximately 3.5km, among passages totalling more than 320km. During this time, they visit 30 out of 2,148 chambers.

On the route, visitors have access to magnificent chapels full of salt carvings and murals and captivating underground lakes. They see original tools and equipment, and traces of mining works which give the comprehension of the miners' struggle with nature, their work, passion and beliefs.

An additional advantage of the mine is its underground microclimate, which is especially beneficial for asthma sufferers. Sanatorium stays are being organized here periodically.

Problems due to congestion

Problems due to congestion are temporary and are connected with the tourist high season, the peak of which is in the summertime. This situation causes specific problems for the mine itself and even more for its neighbourhood.

Most of those problems are connected with the heavy traffic and the lack of parking places. Temporarily, there are not enough parking places close to the mine's entrance and narrow streets around the mine are fully filled with parking vehicles. In addition, many visitors do not notice the signs indicating how to get to the mine.

Temporary congestion causes also some commercial perturbations. Most of the bars, pubs, restaurants, little grocer's shops, and souvenir shops are concentrated in the entrance area, bringing desertion to the other parts of the old town. During the low season, most of those outlets are closed.

Several years ago, the increase of humidity and air pollution were the reasons of destruction of some salt sculptures in the mine. Some of them were slowly dissolving. Water vapour present in the ventilation air in the mine was absorbed into the rock salt at several locations in the mine, causing erosion of the carved salt surfaces. Due to the new air-conditioning system installed in the mine, this problem does not exist anymore.

Global approach

Policy

Main objectives and planning

Demand management

- Promotion of visiting tours during the low season (with price reductions) through paid advertisements in the newspapers;
- Regular information and close cooperation with the travel agencies and the coach companies.

Destination management

- Close cooperation with local and provincial authorities, especially to face traffic and parking problems;
- Efforts to promote a coordinated offer of all the sites of interest in the area of Krakow, so that visitors would programme a longer stay.

Site management

- Improvement of the carrying capacity: the main goal is to create safe and comfortable conditions for about one million visitors (now about 800,000);
- Creation of alternative tourist routes, utilizing additional shafts;
- Better visitor control within the booking office: priority to prior reservation;
- Limited number of visitors at any time on one route, depending on its carrying capacity;
- Additional visiting hours during the high season;
- Individual schedule of tours according to necessities;
- Permanent monitoring of air pollution and humidity.

Specific measures and results obtained

Procedure

Measures related to accessibility and circulation

- The Wieliczka Salt Mine can be reached by car, coach or by train;
- There are parking places at the entrance of the Mine;
- The Mine itself may be visited only with a guide, in groups not exceeding 35 persons per one guide. Tourists are sightseeing by foot.

Measures related to entrance facilities and infrastructure

- There is a cash dispenser machine and an exchange kiosk at the entrance (open from March to November);
- In the chamber complex located 125 m underground there are souvenir shops, a restaurant and a post office for visitors;
- The handicapped in wheelchairs can tour the most popular parts of the Wieliczka Salt Mine.
 Up until the end of 2003 they were entitled to free admission after arranging the visit in advance.

Booking and advance payment of entrance tickets

- It is possible to arrange the booking and advance payment via the Internet, by phone and by fax;
- Due to booking requirements, in case of groups, the date and time of arrival should be arranged beforehand on the phone with the Department of Tourism.

Visitor flow control measures within the site

 There is full visitor control in the mine. Pursuant to the Geological and Mining Law of 1994 and the 2002 Instructions of the Minister competent for public administration on safety and fire protection in underground mines, an internal Regulation was issued, limiting the number of visitors to 35 people per one guide in each group. This limits the number of visitors staying underground at the same time to 2,500.

Communication policy

- The information about the Salt Mine of Wieliczka is widely spread in newspapers and special tourist magazines;
- Numerous issues related to conservation and protection of the site are discussed in scientific magazines;
- The Wieliczka Salt Mine has its own website, in Polish, French, English and German, which
 provides useful information about the mine and the regulation of access. Additional
 information can be found on different websites maintained by the local or provincial
 administration;
- The Mine's Management Office organizes many additional events, such as concerts, festivals, exhibitions, etc., which gather tourists not only for visiting the site.

Agreements with public authorities

- Communication policy on state roads and about traffic is beyond the Mine management's control. The management may express comments or suggestions, but the decisions belong to the state, provincial or local authorities;
- There are some specific collaboration agreements regarding local tourism issues and regulation of access.

Collaboration with the local / international tourism industry

- The Salt Mine is the member of Wieliczka's Tourist Organization and Malopolska Tourist Information;
- It also cooperates with the Polish Tourist Information Center. The mine is represented in many international tourist conferences, exhibitions and meetings.

Consequences

For the local community

- Tourism is supporting the local economy and creates many working places for the local community;
- Some disturbances may appear due to road traffic, lack of parking space, and hotel accommodation;
- Better standard of commerce and accommodation services.

For the visitors

- Better comfort of visit:
- Better possibilities for obtaining information about the site and making a reservation;
- Shortening of the waiting time in case of individual tours.

Further steps

- The mine has applied for the permission to create additional parking space, which will be situated near the entrance, on the mine's property;
- Still better promotion for visiting the site during the low season;
- Creation of additional alternative routes;
- New attractions for visitors waiting for the tour;
- Organizing more additional events in the mine, such as concerts, exhibitions, festivals, charity balls, etc.;
- Better reception during the high season;
- Objective of increasing the number of visitors to 1 million per year.

LA POINTE DU RAZ, FINISTERRE, FRANCE

Main source of information: Bruno Cariou, Syndicat Mixte de la Pointe du Raz (March 2004)

Edited by: Anne Vourc'h

Location map



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Identification

The site of La Pointe du Raz is located in Britanny, at the western end of Europe. It is formed by two rocky peaks (La Pointe du Raz, itself, and La Pointe du Van), separated by a small bay, the Baie des Trépassés. The site is a real natural monument of high cliffs ending in rocky blades, stressing the feeling of being at the extremity of the continent. It covers some 200 ha.

The site, as a landscape of high interest, is protected by an ancient and strict French law of 1930 prohibiting any intervention without prior ministerial approval.

Progressively degraded by overfrequentation and the lack of active management, the site has been selected

for a pilot project of restoration and long term planning, with very satisfactory results.

Problems due to congestion

La Pointe du Raz has been a tourist attraction since the end of the XIX century, with as many as 850,000 visitors per year. 80 % are local and national visitors, 20 % being foreign visitors.

The growing congestion has had very harmful effects on the site and was causing disturbances for the visitors:

- Concentration of the visits on a limited number of days, in July and August and over the spring weekends;
- Loss of satisfaction for the visitors due to congestion and crowding, in complete contradiction with the spirit of the place;
- Complete destruction of the vegetation by intense trampling, with a dramatic erosion of a site exposed to severe climatic conditions (strong wind, heavy rain, etc.);
- Invasion of the site by cars, almost to the extremity of the site. No integration of the car parks into the site. Rudimentary reception facilities.

Global approach

Policy

Main objectives and planning

From 1988 on, a comprehensive restoration and management plan has been implemented for the protection of the site and the satisfaction of the visitors. It is based on a permanent collaboration between all the stakeholders: national and local authorities, voluntary environmental associations, tourism industry, commercial services located nearby or on the site, etc. They all have approved the global objective and the management plan and have contributed to its funding.

The global objective is to address the problems due to congestion without limitation to the number of visitors, thanks to better organization of the visits, so as to limit the negative effects on the site.

Nowadays, the carrying capacity is 850,000 visitors, with a much better visitor experience and serious guarantees against degradation of the site.

Demand management

Regular links with the coach companies in order to promote visits outside the peak periods

Permanent information of the potential visitors explaining the interest of out of season visits.

Destination management

On site information is given to the visitors about other sites of interest in the area, in view of encouraging longer stay and of increasing local economic fallouts.

Site management

- Restoration of soil and vegetation, to come back to the natural conditions;
- Creation of a main entrance to the site, located almost 1km away from the previous entrance
 gate. It offers, besides a car park, a visitor's centre, information service, various shops and
 toilets. This distance has given the visitors a pedestrian space with a much better perception
 of the whole site. With less concentration of visitors, there is no longer an impression of
 crowd, which used to be so much in contradiction with what was expected of a natural site;
- Establishment of zonings in the site, according to their fragility:
 - A zone of entry, where the visitors are welcomed ("honey pot"), located at La Pointe du Raz itself, with services to the visitors and facilities to welcome them in good conditions;
 - A large walking and discovery zone, along a network of paths well maintained on La Pointe du Raz and in the direction of La Baie des Trépassés;
 - A section of the site, more fragile (La Pointe du Van), is particularly protected and the visitors not encouraged to reach it.
- Opening of several routes of various interests and corresponding to the physical aptitudes of the visitors;
- Setting up of a new management body, in charge of day-to-day maintenance, of public information and of the relations with the local authorities and the tourism industry;
- Public awareness of the preservation measures.

Specific measures and results obtained

Measures related to accessibility and circulation

- Access to the site mainly by individual car and by coach;
- Better circulation in the proximity of the site thanks to improved signage and the interdiction
 of parking along the access road, which was a cause of traffic jams;
- Since it is a dead end, it is particularly important to control the access to the parking areas and to provide enough parking space so as to keep the traffic fluent;
- At La Pointe du Raz itself, there is paying parking. Of course, the visitors are informed about the price. But payment takes place when they are leaving, in order to avoid congestion at the entry points and a possible traffic jam;
- During peak periods, the staff helps the visitors park their car, in order to maximize the car
 park capacity and to avoid traffic difficulties.

Measures related to entrance facilities and infrastructure

- There are plenty of parking spaces; they are of high standards and well integrated into the site. One third is surfaced and permanently open. The rest is covered by grass, in order to keep a natural aspect, and they are open according to the needs;
- The main car park is located at La Pointe du Raz itself, close to the visitor's services : information desk, shops, cafeteria, toilet, interpretation centre;
- At La Pointe du Van, the car park is small, with a minimum of services, in order to protect the fragility of this part of the site. This also helps to maintain a more intimate atmosphere.

Booking and advance payment of entrance tickets

• There is a reservation system (strongly recommended) only for the guided tours. Otherwise, the visitors have permanent access to the site.

Visitor flow control measures within the site

- Clear delimitation of paths, that the visitors are not allowed to leave, and of large stop areas with panoramas. The visitors are informed about the reason why they absolutely have to remain on the paths, and they understand it very well: there are very few infractions;
- The important development of the network of paths (7km of walking ways) helps in spreading the visitors throughout the site;
- A variety or routes, according to the various publics, helps in answering to the different wishes, while spreading the visitor's flows:
 - A free shuttle access to La Pointe du Raz from the parking spaces is proposed to the visitors who cannot or do not wish to walk. This allows to reduce the time of presence on the site of categories of visitors who are not interested in a comprehensive exploration of the site;
 - General public paths, of easy access, offer magnificent views over the site and the sea;
 - More confidential paths, for good walkers and connoisseurs.
- Eco-meters along the paths make it possible to know exactly and permanently the number of passages and to regulate the flows;
- Control of the entries and regular surveys allows the manager to know the number of visits to the site and to adjust accordingly the programme and the staff.

Communication policy

- Communication about the site is the responsibility of the management body. The restoration of the site has been extensively presented in the media and is considered as a show case;
- The image of the site has been much improved and the public is now aware of the fragility of the site and the requirements of its preservation. The behaviour of the visitors has also considerably changed;
- A 15-minute film mentions the stages of the rehabilitation process and is presented to the public in the interpretation centre;
- The website provides general information and advice for a visit of the site in the best conditions.

Agreements with public authorities

The local authorities, not only have been active in the preparation and the implementation of the project, but also act as a leader partner in bringing back all its original quality to the site. They take part in the management body of the site, which has a public status.

Collaboration with the local / international tourism industry

- Close cooperation with the coach companies, in order to regulate traffic and to spread the visits off peak periods. The interpretation centre is open all year round, so as to encourage off season visits:
- The businesses operating at La Pointe du Raz (souvenirs, bars, cafeteria, etc.) were initially
 reluctant to the idea of transferring their activities at the extremity of the site. Through
 cooperation, they finally accepted the project and, today, recognize that they benefit from the
 new arrangements.

Investment and funding

- The whole project of restoration and of re-organization of the management was an
 investment of some 10 million Euros. Thanks to public funding (State, Local Authorities),
 investment of tourism industry, business sponsoring and a subscription by the general public:
 "Let us save La Pointe du Raz";
- The annual operating budget amounts to some 600,000 Euros, completely covered by the visitors (entrance fees, parking fees, etc.).

Consequences

For the local community

The local population is proud of La Pointe du Raz, a site of which the original quality has been restored. It is a real emblem for the region. The site provides economic fallouts for the surrounding area: the visitors are encouraged to visit the region and to stay longer.

For the visitors

Thanks to an annual visitor satisfaction evaluation system, the management body knows that the visitors enjoy the new organization, after restoration. They do appreciate very much the quality of the environment and of the landscape.

The regulation of the traffic and of the flows of visitors are not considered as a limitation to their experience of the site. On the contrary, they understand that the management measures leave an intact feeling of freedom and of discovery. The visitors have no objection to paying for the parking, knowing that all the collected money is dedicated to the long term preservation of the site.

Further steps

- La Pointe du Raz is about to obtain the label of excellence "Grand Site de France" awarded
 to the sites with a management along the principles of sustainable development, by the
 Ministry of Environment;
- Further promotion of actions in the surrounding area, with additional hotel accommodation for eco-tourists and hikers;
- Development of new routes of discovery, in relation with the natural and the architectural heritage, starting from La Pointe du Raz.

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