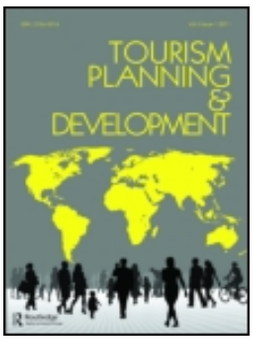

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Applying Travel Pattern Data to Destination Development and Marketing Decisions

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ABSTRACT *This study applied empirical visitor travel pattern data to aid a destination marketing and management organization in Jackson County, North Carolina, USA, a rural mountainous tourism-dependent location. Findings revealed that 44.7% of respondents employed an intra-destination base camp model. Furthermore base campers spent the most number of nights in the area making them potentially the most lucrative target market. However, most base campers stayed in neighboring counties and day tripped to Jackson County, lessening the destination's earning potential. Further analyses suggested development and marketing collaboration opportunities and new ideas for promotional themes.*

Introduction

Travel pattern research investigates the spatial relationship of attractions and destinations based upon tourist visitation patterns, and provides a conceptual framework to study visitor behavior. Travel pattern data aids tourism marketers and planners in understanding how tourists regard the spatial connections between multiple attractions and destinations. A single-destination vacation may involve spending the entire trip at one small geographic area such as a resort, town or county while a multi-destination vacation includes visiting and staying overnight at more than one attraction or destination. Therefore, tourists may treat a particular destination as a stand-alone entity, a major stop on a tour of the region, a minor stopover when passing through, or maybe as an interesting day trip when staying in a nearby destination. When numerous travelers visit more than one destination there is the potential for cooperation regarding marketing and tourism development. Multi-destination research identifies destination linkages from the tourists' perspective, which highlights attractions and regions that could possibly benefit from collaborative efforts (Dredge, 1999).

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Modeling multi-destination trips is more complicated than modeling a single destination excursion. For example, it is easier to model the spatial patterns of a family that flies from Chicago to Orlando and spends two weeks at Walt Disney World, than a family that drives from Chicago to Orlando and makes several stops along the way to visit friends and other attractions. Researchers have presented a variety of multi-destination models that attempt to illustrate the spatial pattern tourists follow (Mings and McHugh, 1992; Oppermann, 1995; Flognfeldt, 1997; Shoval and Raveh, 2004; Lau and McKercher, 2007). One such effort is presented by Lue *et al.* (1993), the five-pattern LCF model of recreation travel. One pattern involves only a single destination, while the other four patterns suggest that the tourists are visiting multiple destinations:

- *single destination*—visitor goes to one location and returns home without other significant stops,
- *base camp*—visitor stays at one location but conducts trips to other attractions or destinations,
- *en route*—tourist has a primary destination but visits other attractions along the way,
- *regional tour*—visitor has several primary destinations within a given region,
- *trip chaining*—visitor has several primary destinations encompassing several regions. See Figure 1.

Lew and McKercher (2006) noted that balancing meaningful analysis with usability is a challenge to travel pattern model development. Complicated models may be difficult to

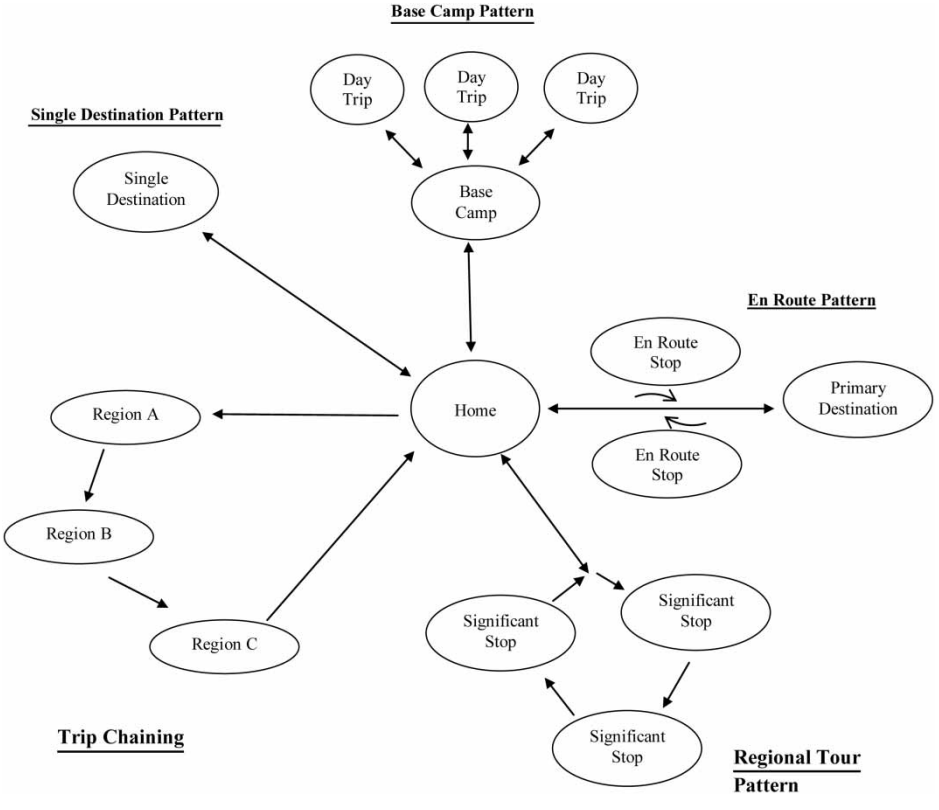

Figure 1. LCF travel patterns adapted from Lue, Crompton and Fesenmaier (1993).

interpret and apply, while simplistic models may not provide adequate detail to be useful. The five-pattern LCF contains many major components of other, more sophisticated and detailed travel pattern models, while the streamlined nature of the LCF makes it a potentially applicable model for tourism destination stakeholders, which is why it was chosen for this study.

An additional challenge to travel pattern research is defining a destination. Hwang and Fesenmaier (2003) noted that travel pattern research is often context-specific regarding destination designation. Cho (2000) suggested that spatial and characteristic diversity make it difficult to classify destinations. The United Nations World Tourism Organization's (UNWTO) destination definition highlights the challenges to defining a destination based upon scale, stakeholders, and geography:

> a physical space in which a tourist spends at least one overnight. It includes tourism products such as support services and attractions and tourist resources within one day's return travel time. It has physical and administrative boundaries defining its management, and images and perceptions defining its market competitiveness. Local destinations incorporate various stakeholders often including a host community, and can nest and network to form larger destinations. Destinations could be on any scale, from a whole country (e.g. Australia), a region (such as the Spanish "costas") or island (e.g. Bali), to a village, town or city, or a self-contained centre (e.g. Center Parc or Disneyland). (UNWTO, 2007, p. 1)

Some relatively recent travel pattern studies have focused on understanding visitors' intra-destination patterns. In studying visitors to Jerusalem, Israel, Shoval and Raveh (2004) found that the number of previous visits and length of stay affected tourists' movements and visitation patterns. Lau and McKercher (2007) and Alant and Bruwer (2010) reported that tourist intra-destination movement patterns differed between first time and repeat visitors. Repeat visitors to Hong Kong ventured further from their hotels than first time visitors (Lau and McKercher, 2007). Travel movements also varied per day of the visit. On the first and last days, visitors stayed closer to their hotels but traveled more widely during the middle of their visit. In a regional Australian study, Alant and Bruwer (2010) reported that first time visitors typically patronize the most well-known regional wineries first and then work their way to the lesser known and more unique vineyards.

Lew and McKercher (2006) identified a series of factors, both tourist and destination related, that affect tourist movements or travel patterns within a destination. They proposed a series of intra-destination movement patterns that could be modeled in the two dimensions of territoriality (distance from accommodations and available opportunities) and linearity (geographical location). In a continuation of studying intra-destination travel patterns, McKercher and Lau (2008) incorporated a geographic information system to aid in determining 11 prominent movement or itinerary styles within an urban destination. They found length of stay, risk avoidance, and willingness to engage the destination as important factors determining movement patterns.

Few empirical studies focusing on the LCF model have been published. Exceptions include Chancellor and Cole (2008) who used a geographic information system to reveal possible new tourist origin markets, Hwang and Fesenmaier (2003) who studied the 1995 American Travel Survey household data, and Stewart and Vogt (1997) who studied visitors to Branson, Missouri. This present study adds to the travel pattern literature in two major ways: 1) it provides detailed empirical evidence regarding the LCF model's ability to identify linkages between regional and local destinations, and 2) it links theory to practice by providing a practical application indicating how travel pattern data can be used by destination management and marketing organizations (DMMO).

Many destination travel demand models in the tourism and outdoor recreation literature assume tourists visit only a single destination per trip, although several researchers argue that most trips involve multiple destinations (Hanson, 1980; Lue *et al.*, 1993; Holt *et al.*, 1998). Therefore, understanding multi-destination patterns may be more valuable in depicting visitors' actual travel behavior. Travel pattern data can be considered from demand and supply perspectives. The demand perspective identifies travelers' behaviors and motivations for undertaking a particular travel pattern. The supply perspective relates to tourism stakeholders who may use this data to position their attraction or destination based upon visitor-identified linkages to other attractions and destinations. This paper will briefly discuss the demand perspective but focus primarily on the supply perspective of travel patterns.

Demand Perspective

Several reasons have been proffered to explain why travelers would take a multi-destination rather than a single destination trip. Perhaps the most intuitive concept is simply that much of the world is very mobile, so multi-destination trips are feasible and relatively easy to conduct (Wall, 1978). Additionally, a larger number of destinations may need to be visited in order to satisfy a number of desires. This could be especially true in group travel when there are a variety of interests to consider (Lue *et al.*, 1996). Multi-destination travel may also reduce the risk that visitors will be disappointed with their travel experience. If the primary destination fails to meet the travelers' expectations then the other destinations may provide sufficient satisfaction for the trip to be considered a success (Lue *et al.*, 1993).

Economic rationalization as described by Tideswell and Faulkner (1999) may also contribute to multi-destination travel. Specifically, in order to save time and money travelers may visit multiple destinations during one trip rather than make multiple trips. It requires fewer resources and effort to visit several destinations on a single trip than to plan and conduct additional trips. A Yellowstone National Park visitor study illustrated the concept of economic rationalization, as 80% of the visitors also journeyed to other western landmarks (Mings and McHugh, 1992). The further they lived from Yellowstone, the more likely the respondents were to visit other destinations.

Wu and Carson (2008) found that international and domestic travelers to South Australia exhibited different dispersal behavioral patterns. Specifically, international tourists covered a larger geographic area and visited bigger more well-known attractions, while domestic tourists spent more time in the area and also visited smaller attractions and destinations in the region. They employed a geographic information system to visualize the dispersal patterns.

Supply Perspective

From a supply perspective, Lue *et al.* (1993) suggest that although multi-destination trip information provides a more complete picture of a trip's spatial component, it is easier and more common to model single-destination trips. Additionally, travel organizations are typically interested in visitor behavior only while the visitor is in the organization's sphere of business or influence (Perdue and Gustke, 1985). However, analysis of multi-destination travel allows DMMO to determine linkages between visitor stops, which provides a different set of benefits. Specifically, this analysis aids in evaluating a destination through the lens of the cumulative attraction concept and the gravity concept, both of which can aid in development and marketing decisions. Viewing a region the way tourists

use the region may provide a more accurate picture regarding demand for accommodation, services, and attractions.

The cumulative attraction concept focuses on linkages between attractions and destinations and serves as a theoretical framework for travel pattern research (Lue *et al.*, 1993). It assumes that tourism businesses share customers, and that each attraction will increase business by being linked to other attractions. From a planning perspective these linkages can be established by developing attractions within a specific proximity or in a logical sequence to each other. Similarly, Gunn and Var (2002) suggested that isolated attractions require too much time and effort for the traveler, so clustered attractions have a competitive advantage.

Closely aligned with the cumulative attraction idea is the gravity concept, which suggests that a large primary attraction has a larger gravitational pull on travelers than smaller secondary attractions. Therefore, large primary attractions have more of an ability to attract visitors than smaller secondary attractions (Crossley *et al.*, 2012). Secondary attractions often cluster around a primary attraction to take advantage of its numerous visitors. Clustering increases the gravity effect of the entire area. However, smaller attractions may also cluster together to become a collective attraction in order to create a larger destination presence and produce a stronger gravity effect. Each attraction, large or small, should benefit from clustering, since overall gravity strength will increase. Travel pattern analysis identifies existing visitor linkages between attractions or destinations, which provides useful information to DMMO looking to employ the cumulative attraction concept and increase a destination's gravity effect. After current linkages are identified, stakeholders can consider development options to strengthen or create additional linkages. Development options could include infrastructure such as transportation routes, complimentary attraction development, or tourist services development.

Although the concepts of cumulative attraction and gravity effect pertain directly to development theory, they can also be applied to the marketing of existing attractions and destinations. Destination marketers may use travel pattern data to determine promotion partners within existing spatial configurations of attractions (Tussyadiah *et al.*, 2006). Partnering would create a larger destination concept and stronger gravity effect for each partner. For example, if managers of medium-sized destination A discover that a sizable number of their visitors stop by when en route to the larger destination B, cooperative promotions and packages might increase each destination's visitation. A collaborative promotional scheme would seek to entice more visitors to destination B, and more of destination B's visitors to stop at destination A.

An empirical study by Stewart and Vogt (1997) illustrated the use of the LCF model to evaluate potential destination linkages. Travel patterns of Branson, Missouri visitors were evaluated to determine the usefulness of encouraging these visitors to also visit the Mark Twain National Forest (MTNF). It was reasoned that if visitors employed a multi-destination pattern then they would be more likely to visit other destinations such as the MTNF. However, if respondents employed a single-destination pattern and only visited Branson, those visitors might not be a viable target market for MTNF. Their study revealed that 70% of visitors did indeed use a multi-destination pattern and 41.4% of that group used an en route pattern (tourists have a primary destination but visit other attractions along the way). Therefore, promoting MTNF as a side trip for tourists traveling to and from Branson might encourage more visits to the MTNF.

If research reveals that a sizeable number of travelers are base campers (tourists who stay at one location but day trip to other attractions within another marketing or administrative organization's sphere of influence) then it is likely that a myriad of potential partnerships can be identified. Base camp information reveals locations that travelers are

willing to day trip to, which provides the destination manager with geographic boundaries when considering overall gravity effect and marketing collaboration opportunities. If base campers stay at destination D yet make day trips to attractions located in another travel marketing organizations' location then these destinations and attractions have a cumulative gravity effect which is larger than any of the individual destinations' gravity effect. The distance from destination D to the other destinations and attractions would constitute a gravity effect that might be different than destination D promoters realized before analyzing travel pattern data. If day trippers venture further from destination D than managers realize, the area's destination gravity effect is larger than the managers realized. An increased gravity effect would make the destination more competitive with traditional rival destinations, and possibly more competitive with larger scale destinations (Bolson, 2005).

It is assumed that if an area is commonly part of tourists' base camp pattern then the preferred destination would be the location where the tourists base camp, as opposed to an area where base campers only day trip to. In the aforementioned scenario, destination D would seemingly profit more than the day trip destinations due to expenditure on lodging, food, and other visitor services. Therefore, destinations that are part of a base camp pattern may consider positioning themselves through marketing as the location to base camp from. Lastly, cooperative promotions based upon travel pattern data would also provide destination economies of scale. By combining promotional resources to create a larger gravity effect, attractions may provide a more comprehensive promotional package than each attraction can do on its own (Hill and Shaw, 1995; Bolson, 2005).

Purpose of the Study

The purpose of this study was to investigate the usefulness of empirical travel pattern data to DMMO. Specifically, visitors' movements were evaluated through the lens of a modified LCF model to reveal new marketing and tourism development opportunities for DMMO in western North Carolina, USA.

Research questions include:

1. Do visitors differ by travel pattern regarding eight dependent variables (number of nights from home, number of nights in the area, travel party size, household income, age, distance from home, number of previous visits, and first time or repeat visitor)?
2. Do base campers who use lodgings in Jackson County differ from those who use lodgings elsewhere and day trip into Jackson County?

Each dependent variable contributes a piece of information that aids destination stakeholders in understanding their visitors for marketing and development purposes. Number of nights from home and the number of nights in the area may vary by travel pattern (Shoval and Raveh, 2004) and are useful to determine how long visitors are staying at a given destination and how long they are staying there in relation to trip length. It is surmised that the longer a visitor stays in an area the more revenue through lodging, food and beverage sales, services, and attractions are generated. Knowing the ratio between nights in the area and nights from home might provide insight into the possibility of increasing the visitors' stay in the area. For example, if the visitor is away from home 10 nights but only stays in the destination five nights then it might be possible to encourage an extended stay. Location of accommodation data was collected in order to better understand visitor travel patterns within the western North Carolina region. The variables of household income, travel party size, number of previous visits, age, and distance traveled

from home may aid marketers as they develop promotional messages and determine markets and media to place messages. Number of previous visits, travel party size, and distance traveled have been found to vary by travel pattern employed (Mings and McHugh, 1992; Lue *et al.*, 1996; Shoval and Raveh, 2004; Lau and McKercher, 2007; Alant and Bruwer, 2010). Base campers were singled out for further analysis because initial findings indicated they might be a particularly lucrative target market.

Methods

Data on travel patterns, activity choices, sources of travel information, and demographic information was collected from independent leisure travelers, at least 18 years old, who visited Jackson County (JC), located in the Appalachian Mountains of western North Carolina, USA. Tourists are drawn to this area for the wide variety of outdoor pursuits as well as quaint tourist-oriented towns. JC tourism officials were consulted to determine the intercept points in order to ensure that a breadth of attractions and locations were chosen to provide a representative and robust sample of summer visitors. Eight intercept points were chosen including the three tourist-oriented communities providing shopping, eating, accommodation, and entertainment, as well as five popular outdoor venues which in sum offered scenic views, waterfalls, hiking, and water sport opportunities.

A mobile interviewer conducted interviews at each intercept point on randomly selected days and at a randomly selected times of day. A total of 1008 individuals were intercepted and 809 participated in the study, for a response rate of 80.3%. However, a total of 715 responses were included for this project, as 96 were eliminated due to the respondents being on day trips only, meaning that they did not spend a night away from home, so could not be considered visitors according to the UNWTO (2007).

Defining destinations in western North Carolina (WNC) is challenging, as the region's natural resources are very similar to each other, so there is a consistent background regional image. However, there are numerous competing administrative units, or DMMO, primarily based upon geo-political units such as towns, counties, and sub-regions. Figure 2 depicts WNC as a regional destination comprised of nested local destinations delineated along the geo-political unit of the county.

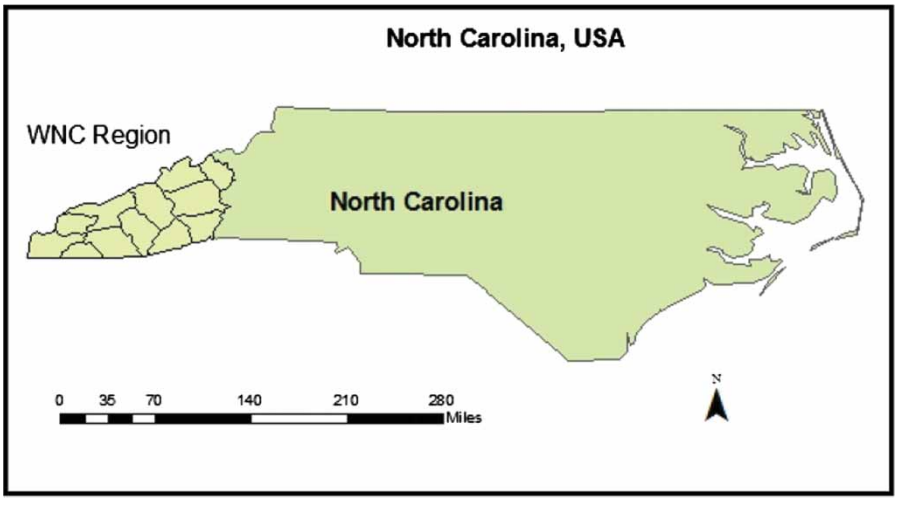

Figure 2. North Carolina, USA with WNC regional destination.

After much consultation with local tourism officials regarding the most useful unit of analysis for their marketing and development planning purposes, it was decided that county level analysis would be the most useful. This determination was based upon the fact that in this rural area, as is the case with many rural USA tourism destinations, the dominant DMMO are often at the county level. Although some collaboration between counties exists, in most cases they are primarily competitors for tourists to the region, especially in areas like WNC where they all have somewhat similar natural attractions. Therefore the county was used as the unit for analysis in a portion of the results.

Analysis of Data

SPSS (19.0) statistical software was used to store and analyze data. Frequency tables were generated for demographics and counts of individual travel patterns users. One-way analysis of variance (ANOVA) and *post hoc* tests were used to determine whether differences existed between the groups of travel patterns users. Chi-square was used to analyze categorical data.

Results and Discussion

Demographically, visitors arrived from 36 states and 12 countries; there were more male (61.5%) than female (38.5%) respondents and the vast majority (80.6%) were married. Respondents indicated a high education level with over 63% having a four-year or graduate degree, and two-thirds were employed full time with over 27% having a household income of at least US$100,000. Additionally, 74.4% were repeat visitors.

Respondents favored a single-destination pattern (69.9%) over a multi-destination pattern (30.1%), which supports earlier studies such as Hwang and Fesenmaier (2003) that found 93.8% of respondents to an American travel survey employed a single destination model. However, it is contradictory to studies by Murphy and Keller (1990) and Stewart and Vogt (1997), which found the multi-destination models to be more common.

Initial analysis adhered to the LCF model but further consideration determined that a modified LCF would be more appropriate. Specifically, within the single destination group there was a distinct bimodal distribution of respondents based upon nights in the area, which allowed for very different intra-destination travel patterns. Specifically, those who stayed fewer days traveled much less throughout the region. Therefore respondents were redistributed into three categories based upon their travel pattern: 1) short getaway (180, 25.2%)—visitors who stayed three days or less, often over a weekend, and traveled short distances from their lodging; 2) base campers (319, 44.7%)—visitors who stayed four days or more in one location and day tripped throughout the region; and 3) multi-destination (215, 30.1%)—visitors who employed an en route, regional tour, or trip-chaining pattern.

Significant differences ($p < 0.05$) existed between the three groups on several of the eight dependent variables (see Table 1). Regarding nights from home, all groups differed significantly, with multi-destination visitors being away the longest (10.24 nights). Regarding nights in the area, all groups differed from base campers, who vacationed the most nights in the area (7.97 nights). Short getaway and base camper visitors spent a much higher percentage of their vacation, and probably money, in the area than multi-destination visitors. Multi-destination visitors had significantly fewer previous visits (5.31) than the other groups. Not surprisingly, distance from home (miles) was significantly different between all groups, with short getaway visitors (141.21) traveling the least miles. Multi-destination users had the smallest number in their travel parties (3.28), which only significantly differed from base campers (3.96) who had the largest travel

Table 1. Significant travel pattern differences

Variable	Short getaway	Base camp	Multi-destination	Significance ($p < 0.05$)
Nights from home	2.12[a]	8.4[a]	10.24[a]	$F = 113.615$
Nights in area	1.94[a]	7.97[a]	2.97[a]	$F = 127.375$
Number of previous visits	11.07[a]	11.84[b]	3.89[a,b]	$F = 9.389$
Distance traveled (miles)	141.21[a]	374.62[a]	453.28[a]	$F = 103.370$
Travel party size	3.66	3.96[a]	3.28[a]	$F = 3.220$
First time/repeat visitors	43/137[a]	56/263[a]	84/131[a]	X^2 (2,N = 714) = 31.573

[a,b]Same superscript within a row indicates a significant difference ($p < 0.05$) exists between the travel patterns.

parties. The vast majority of short getaway and base camp users were repeat visitors, but the opposite was true for multi-destination users. There were no differences between the three groups regarding age and income.

From the DMMO perspective, the initial analysis revealed that most respondents were repeat visitors, which indicates some degree of loyalty to visiting the region. However, 67.3% of visitors used accommodations outside JC. Differences in distance traveled existed between all three groups, which could have marketing implications. Base campers emerged as a particular group of interest since they were 44.7% of all visitors and spent by far the most nights in the area (7.97).

Regarding that 67.3% of visitors did not use JC accommodation, local tourism officials were appreciative that their attractions drew visitors from outside their sphere of influence, but were disappointed that their lodging establishments were not approaching desired capacity levels during the data collection time. To better understand this phenomenon a first step would be to conduct an analysis of regional lodging supply including pricing, to determine whether JC lodgings differed from neighboring areas. Additionally, those who used accommodations in JC had a higher income level ($96,370) than respondents that stayed in neighboring counties ($74,202), which might indicate that a market exists for lower priced accommodations in JC. An analysis of visitor spending patterns and needs would be beneficial to better understand potential promotional and development strategies based upon visitor income and current lodging supply.

Based upon distance from home, promotional campaigns could be tailored per travel pattern, which might result in a higher return on investment. Short getaway users travelled an average of 141 miles from home, and key cities within this range could be targeted for promotional campaigns highlighting the importance of short getaways. Specific attractions and lodging packages could be developed to entice a 2–3-day visit. Marketing efforts oriented toward base campers would be directed at visitors interested in longer vacations and who lived further away, since base campers averaged being 375 miles from home. JC tourism officials promote through various media outlets throughout the southeast, and this data could be used to evaluate these efforts.

Base campers were in the area for the most number of nights (7.97), and they accounted for approximately 44.7% of all visitors, which indicates that they are likely the most profitable group to target, and that the area has a significant gravity effect (Crossley *et al.*, 2012). Due to the potential importance of base campers as a target market, more analyses were conducted on users of that pattern. Specifically, base campers who stayed in JC (130, 40.8%) were analyzed against base campers who stayed in other counties (189, 59.2%). The rationale for this distinction is that destination promoters would prefer base campers to stay in their destination and use it as a base camp. However, the only significant

difference was that JC base campers reported significantly higher incomes ($99,945 versus $73,992) than base campers staying in neighboring counties. The visitor spending analysis previously mentioned would aid in delineating the importance of this difference. Also, to increase base camp numbers using accommodations in JC, promotional campaigns aimed at encouraging base camping from JC could be useful. It is common to see promotions of attractions, services, and lodgings in a specific geographic area, but a more directed approach highlighting the benefits of using JC accommodations and their relationship to both local and regional attractions might be constructive.

Additionally, 84% of all respondents ventured outside the county of which they were lodging, indicating that respondents traveled regionally once at the destination. This further suggests that regional rather than only town or county level collaboration may be beneficial. Tourism marketing is often based upon geopolitical boundaries, but these findings suggest that perhaps promotional strategies based upon travel pattern factors might be more beneficial. Specifically, intra-regional DMMO could collaborate around themes and distances identified by visitor travel patterns. For example this study found that base campers were day tripping to attractions 40–50 miles further than JC tourism officials were orienting their point of purchase promotional materials. While tourism officials routinely collaborated with adjacent counties for marketing and development projects, this study identified counties further away as potential new collaborators, and provided more insight on the region's gravity effect. Figure 3 illustrates the local destinations nested within the larger WNC regional destination. Each county is labeled and the dots within each county indicate a town that is another layer of nested destinations. Since JC is the focus area, each town containing a DMMO is labeled. The majority of base campers were staying in an adjacent county and JC base campers were primarily visiting these counties. However, a surprising number of base campers were venturing to and from counties that are not adjacent to JC, which provided DMMO additional collaboration opportunities.

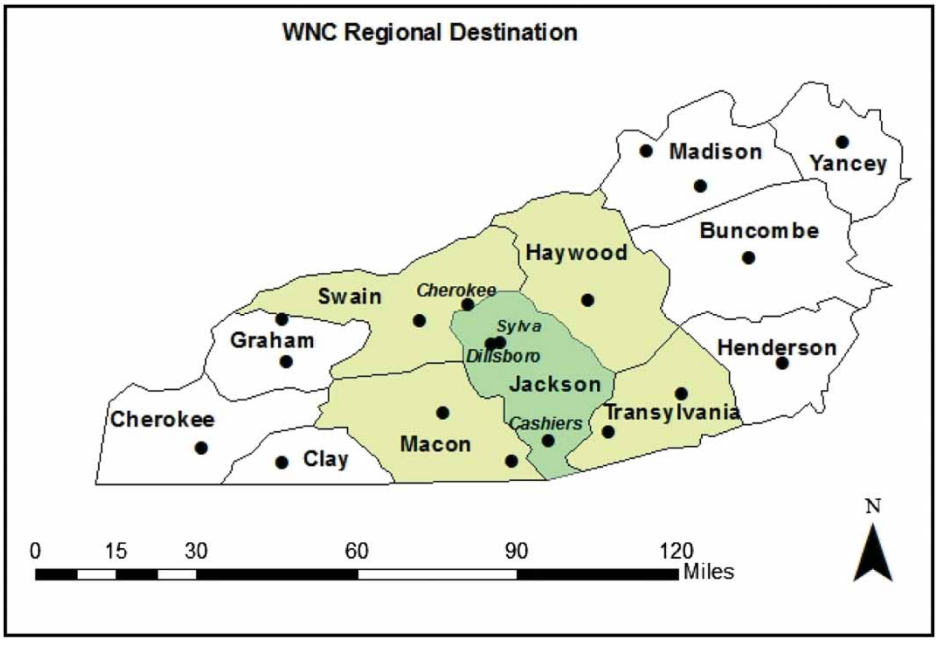

Figure 3. Western North Carolina regional destination with nested local destinations.

Limitations

Although this study has a robust sample size and sought to achieve an accurate cross section of visitors through the variety of intercept points, the fact that respondents were only contacted at public attractions may limit the number of responses from visitors staying at one of the inclusive resorts. The same situation could be said for second home owners. However, second home owners and inclusive resort visitors did participate in this study.

Data for this study were collected during the summer, so results from this study cannot be generalized to other seasons, particularly October (leaf season), which according to JC tourism officials is the busiest month of the year. Considering that public schools are in session during October and that traditionally Americans take longer vacations in the summer, it is quite possible that variables such as nights from home and nights on the trip would differ significantly during October and other non-summer months. It is also possible that couples without children (or couples traveling without children) and retirees would make up the majority of visitors in the non-summer months since school is in session during most non-summer months.

Conclusions and Future Research Suggestions

This empirical study bridges theory to practice by demonstrating how travel pattern research in general and a modified LCF model in particular can aid tourism destination stakeholders in marketing and identifying potential regional marketing and development collaboration partners. Aided by a robust sample size, this study contributes to the ongoing progress of better understanding visitors through travel patterns. Few studies using the LCF model have been published and fewer yet that focus specifically on benefits of travel pattern data to tourism suppliers.

This study raises questions for future research. The base camp pattern was the most common pattern found in this study, which agreed with findings by Lew and McKercher (2006). It would be useful to know the distance base campers are willing to travel for a day trip and the economic impact of base campers compared to other travel patterns. McKercher and Lau (2007) identified 11 intra-destination tourist movement patterns in an urban environment, and it could be beneficial to delineate visitor movements in rural destinations to that level. The lack of public transportation, coupled with distance between attractions and services would most likely mean a rural regional destination like WNC would have different intra-destination visitor movement patterns. Lau and McKercher (2007) used a geographic information system to systematically analyze tourist movements in a predominately urban destination, and employing similar methods in a rural destination would be beneficial and aid in determining the distances base campers are willing to travel in a day trip.

Second home ownership is a growing fraction of the WNC tourist segment and there are numerous inclusive resorts. A travel-pattern study focused on second home owners and tourists staying at inclusive resorts would be important to more fully understand WNC visitors. Lastly, this study was conducted during a high visitor season and it would useful to repeat the study both during the highest season as well as the shoulder season, as different results might emerge.

H. Charles Chancellor is an Assistant Professor and Coordinator of the Tourism, Hospitality, & Event Management Major in the Department of Recreation, Parks, and Tourism Studies at Indiana University. His research interests include sustainable tourism and incorporating GIS into tourism planning.

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