

San Diego Tourism Marketing District Metrics for Returns on Investment (ROI)

Executive Summary and Recommendations

The San Diego Tourism Marketing District (SDTMD) receives funding to support organizations and specific programs that help generate and/or increase hotel room night production in the City of San Diego. The SDTMD has measured return on investment (ROI) for these funds as the primary gauge of the grants process and seeks to evaluate this approach, the methods and metrics used in computing SDTMD ROI, and how ROI factors into grants decision-making.

Contractors reporting an ROI have been found to use a variety of methods to compute ROI. This white paper discusses ROI measurement and makes the recommendation moving forward for a set of consistent procedures across time and across funded organizations, and for support for contractors' capture of estimated measures of hotel consumption when needed.

The History of the SDTMD Formation

Conceived and developed by a coalition of lodging business owners and managers representing the San Diego County Hotel Motel Association and the San Diego Lodging Industry Association, the San Diego Tourism Marketing District (SDTMD) is a benefit assessment district proposed to improve tourism activity and hotel room night consumption in the City of San Diego.

The SDTMD assessment is based upon 2% of gross room revenue from transient stays for lodging businesses with 70 or more sleeping rooms operating within the City of San Diego.

On May 8, 2007, the San Diego City Council adopted an enabling Procedural Ordinance that allowed for the formation of a Tourism Marketing District (TMD); on December 3, 2007, City Council established the Tourism Marketing District in the City of San Diego; and on January 1, 2008, the hotel assessments began.

However, it was not until April 2008, that the contract for the San Diego Tourism Promotion Corporation (SDTPC), the non-profit organization that managed the SDTMD, was signed by the City Attorney (Aguirre). The executive director (Stewart) was hired in May of 2008. The first three months of operation were focused on establishing the basic operational requirements of the organization such as obtaining office space, establishing all business insurance/tax requirements, and hiring a CPA firm. Each required either a formal RFP or a competitive bid process to comply with the contract.

The SDTPC contract called out a list of initial SDTMD-funded entities that would be guaranteed funds from January 1, 2008, through December 31, 2008. Because FY2009 started on July 1, 2008, the SDTPC Board, in effect, inherited pre-determined funded organizations including the San Diego Convention & Visitors Bureau and San Diego North Convention & Visitors Bureau for one-half of FY2009 without any pre-established Return on Investment (ROI) criteria. Furthermore, the SDTPC was established prior to there being a funding application in place.

The executive director, with input from City staff and the SDTPC's CPA and attorney, created the first SDTPC funding application using the framework outlined in the San Diego Tourism Marketing District Management Plan (doc # 000395). The final draft of the SDTPC Application Guidelines was approved by the board in September 2008 – three months into FY2009. This document was titled: "FY2010" and was used for FY2009 Incremental Applications as well as the FY2010 Annual and Incremental Applications.

A positive ROI in hotel room night consumption is required by the SDTMD, however due to the initial wait for the City's Attorney signature on the SDTPC contract and the timing of the actual start-up of the organization, FY2009 began without a funding application for contractors or assignment of specific metrics criteria for expected ROI.

The Original ROI Rationale for the SDTMD

The initial San Diego Tourism Marketing District Management Plan (doc # 000395) outlines the following framework for the use of SDTMD funds:

Requirements:

"Fundamental to the funding of any application will be the clearly articulated benefit to hotels in the City of San Diego. While benefit may be delivered in numerous ways, by far the most important benefit will be measured in the delivery of room nights. Successful applications will clearly describe the strategy and tactics for delivering room nights as well as the number of room nights projected and estimated gross room revenue."

"When considering these fundamental application requirements, priority will be given to: Special need periods of the year; special need geographic locations within the City; and incremental new room nights from existing programs or sponsoring Organizations"

In addition, regarding Assessments Based on Estimated Benefits, the plan specifies that:

"The district's activities are designed to provide benefits specifically for the assessed businesses by increasing tourism within the boundaries of the District and hence increasing hotel room occupancy and revenues. An indirect benefit may accrue to the surrounding community or to the public as a result of the activities to be provided with the assessment levied. These indirect benefits (if any) are incidental and inconsequential."

Using these guidelines, the Board of Directors elected to determine the ROI on the production of hotel room night revenue for hotels within the City of San Diego (SDTMD). Funding would be granted to support organizations and specific programs that help generate and/or increase San Diego hotel room night production. ROI would be measured by dividing the hotel room revenue generated by the funded amount.

Because the SDTMD was new, the board elected to have a very low threshold of ROI for the application requirement. On July 17, 2008, the board unanimously approved that the FY2009/2010 application would require that an applicant would need to exhibit a realistic target of at least 5-to-1 in "Peak Periods" and at least 3-to-1 in "Off Peak Periods" in order to submit an application. For example, a 5-to-1 ratio meant that every SDTMD dollar allocated should support the production of at least five dollars in hotel room night revenue within the City of San Diego. For parity, it also was decided that all applicants use the current Average Daily Rate (ADR) for the City of San Diego Hotels as reported by Smith Travel Research (STR) when determining the ROI.

The ROI can be calculated/credited only for the hotels within the City of San Diego/the Tourism Marketing District. Hotels outside the City of San Diego do not pay into the SDTMD, and cannot be calculated in the ROI.

Geographical Responsibilities of the Two CVBs Receiving Fixed SDTMD Allocations

The San Diego Tourism Marketing District Management Plan (doc # 000395) defines the geographical responsibilities of the two Convention & Visitors Bureaus (CVBs) in Attachment 2 and Attachment 3 as follows:

San Diego Convention & Visitors Bureau (ConVis):

Specific Use for City of San Diego Lodging Establishments

The revenue received by San Diego CVB from the SDTPC will be segregated from other income and may be utilized to sell, market and promote (the City of San Diego to the benefit of) lodging establishments within the city limits of the City, and may include support activities such as critical operational expenses, including but not limited to salaries and benefits.

San Diego North Convention & Visitors Bureau (San Diego North CVB):

Specific Use for City of San Diego Lodging Establishments

The revenue received by San Diego North CVB from the TMD will be segregated from other income and may be utilized to sell, market and promote (the northern portion of the City of San Diego to the benefit of) lodging establishments within the city limits of the City, and may include support activities such as critical operational expenses, including but not limited to salaries and benefits.

ConVis is responsible for all hotels within the city limits of San Diego (and within the Tourism Marketing District) including those in the northern portion of the City of San Diego. In addition to these efforts, San Diego North CVB is responsible for augmenting ConVis' efforts to promote specifically the "northern portion" of the City of San Diego (within the Tourism Marketing District). In FY2009, the total number of available rooms within the city limits of San Diego was approximately 39,793. Of those, San Diego North CVB was responsible for augmenting revenues for approximately 8,113 SDTMD available rooms.

Metrics for the Inaugural Fiscal Year

Returns on investment in the first full fiscal year (FY2009) ranged from 0:1 to 132:1 (unaudited) for the 22 programs receiving base and incremental funding. The various methods used by the organizations to compute ROI for hotel consumption are listed below. No contractors relied on self-reports from hotels for measurement of ROI.

Definite Measurement of Bookings:

- Online hotel bookings [Online Travel Agencies (OTAs), ARES]
- Mandatory hotel block bookings

Estimated Measurement of Bookings:

- Visitor surveys
- Online surveys

No Measurement of Bookings:

- Failure to report any hotel consumption

ROI Formula for Contractors

In the start-up years, the SDTMD is developing best guidelines regarding returns on investment for SDTMD funding.

Subsequent to the start-up half-year when ROI metrics were yet to be established, the SDTMD guidelines for funding applications processed for FY2009 specified the following.

Fundamental to the funding of any application will be the clearly articulated benefit to assessed hotels in the City of San Diego. While benefit may be delivered in numerous ways, by far the most important benefit will be measured in the delivery of room nights. Successful applications will clearly describe the strategy and tactics for delivering room nights as well as the number of room nights projected and estimated gross room revenue. Letters of intent for hotel room blocks and or tentative agreements with hotels will provide the necessary back-up to support the above projections and estimates.

FY2010 SDTMD guidelines for funding applications were more delineated, specifying minimum ROI criteria:

Minimum Hotel Room Revenue Threshold for Application Consideration: In order to be considered for FY2009 addendums and FY2010 funding, a minimum threshold of 5:1 in Peak Periods and 3:1 in the Off Peak Periods is required.... In other words, for every dollar of funding granted, a minimum threshold of five dollars in (peak periods) and three dollars (off peak periods) in hotel room night revenue must be shown.

FY2011 SDTMD guidelines preclude ROI thresholds to allow start-up seeding of enterprises beneficial for tourism development, specifying that:

All successful applicants, including the organizations receiving guaranteed annual funding, will clearly demonstrate a measurable Return on Investment (ROI) for the programs or services they propose. Applicants must develop and demonstrate their suggested method of measuring ROI for their particular program as part of their application and their quarterly performance reports. All ROI results will/may be subject to a third-party audit.

In all cases, the current Average Daily Rate (ADR) from Smith Travel Research (STR) for San Diego City hotels was specified for use as the factor to estimate ROIs for proposals.

The majority of contractors in the inaugural fiscal year were able to report definite bookings based on actual rates. These figures are to be audited and included in the final report for FY2009.

The graph in Appendix A shows organizations' room night revenues based on funding levels.

Market Research Findings from San Diego ConVis North and San Diego ConVis

The SDTMD is analyzing the ROIs reported by ConVis and San Diego North CVB as part of the discussion regarding establishing set ROI metrics moving forward. ConVis initially calculated its ROI based on definite room revenues, room nights booked by OTAs and online access panel surveys of populations targeted by campaigns (conducted in national and feeder markets). San Diego North CVB measured its ROI based on definite room nights booked by sales agents and through ARES on its sandiegonorth.com website. In addition, San Diego North CVB conducted opt-in, online intercept and follow-on surveying of its website's users to develop an "Estimated Room Nights Influenced by Website" metric for its ROI. The ConVis and San Diego North CVB surveys did not distinguish whether or not hotels were in the district. Appendix B is a chart showing ROI calculations for the two bureaus. The chart includes application of the Estimated Room Nights Influenced by Website metric used by San Diego North CVB to the ConVis ROI. The following is a discussion of the validity of such a metric.

Web survey methodologies are relatively new and under serious study. The first published papers on Web surveys appeared in 1996. The online methods used by ConVis (online access panels) and San Diego North CVB (online intercept surveys) are known to have risks that survey participants are not representative of the populations being studied. In the Web survey methodology paper "Selection bias in Internet panels," by G. Lensvelt-Mulders, 2009, the author states that "currently, it is not possible to draw random samples from the general Internet population because there is no high quality sampling frame available." It is important to note that while access panelists may be assigned to be demographically representative of a population, they may not be attitudinally representative due to the self selecting nature of panel participation. Recognizing this, to reduce chances for error, researchers might recruit from list-based samples and periodically check the reliability of panelists against the general population using conventional survey methodologies.

Website visitors who participate in opt-in, intercept surveys are self selected from the website's distinct user population. They are not randomly selected so they are not representative of the general or targeted population. A key issue with this method is the challenge of non-observation – the survey does not measure all the population that needs to be measured which introduces non-response error. That is, the validity of the survey to the entire website's population cannot truly be known unless a test comparison is made against the non-response population.

In the absence of an ideal solution, however, researchers will try to collect the best data available to make intelligent decisions. San Diego North CVB's campaign targeted online users in Los Angeles, Orange County and Phoenix. Measuring the travel behavior of a sample of travel-related users that came to the CVB's site can be used as an inference of all users of the site, with the recognition of the limits of the method and further validation of the survey technique.

The survey is not a scientific measurement of the effects of the San Diego North CVB campaign on hotel room night bookings in the CVB's area. In order to apply a confidence level to data, by definition, the data needs to be collected at random. The follow-on survey of travel-related users of the site evaluates a small sample (n=123) which may or may not by chance be representative of all the site's travel-users.

Sampling is a procedure for estimating population values by means of a subgroup (or sample) of the population. Any estimate of the true population based on sample data must contain some allowance for sampling variations. That is, a survey's percentage result is not an exact percentage, but is an estimate that contains a plus or minus variation. More explanation of sampling is included in Appendix C.

Considerations for Continued Use of Websites Metrics

Other considerations in evaluating the effectiveness of Web survey measurements of hotel room nights are that not everyone goes to the promotional website for information or to book hotel rooms. Ad aware populations may go to other sites to get information and book visits to the region, and thus are not measured on the promotional sites for ROI.

A suggestion is that San Diego North CVB needs to test the Web measurement for accuracy to gain more confidence in the method. Can the survey results be replicated? Can the CVB get feedback from hotels to verify actual results in the marketplace? In addition, any measurement needs to distinguish findings specific to SDTMD hotels.

A "what-if" test applying the San Diego North CVB metric to ConVis ROI results shows the ConVis ROI might be increased from 10.19-to-1 to 29.93-to-1. See Appendix B. The San Diego North CVB metric, because it is derived from a measurement of its unique population of Web users, should not be extrapolated to other websites. The methodology can be applied to other websites' influence on bookings, if amenable to the SDTMD. Other websites would need to conduct their own online intercept survey to develop their Influenced by Website metric. Care would need to be taken to ensure that there is no overlap of the population of this measurement with any other surveys taken to measure ROI. Additionally, since the metric is not validated yet, it is advisable that San Diego North CVB replicate the study and survey San Diego North visitors in a check of the validity of the approach.

Conclusions

Measurement of hotels stays can be definite - you know how many rooms were booked at what rate – or estimated - you sample a statistically significant portion of visitors brought to a destination by an event, attraction, feature, etc. for hotel consumption and extrapolate the average lodging expense to the entire population of visitors.

In cases where contractors use online travel agencies, booking bots and defined event hotel blocks, the SDTMD will have absolute measures of hotel revenue for measuring funding returns on investment.

In cases where proposals, especially for events, may not contain such absolute measures, the SDTMD can stipulate statistical means for the measurement of ROI among event attendees or campaign target populations.

In a meta-analysis of research methodologies for estimating the economic benefits of event tourism [*Estimating the Economic Benefits of Event Tourism*, Howard Bond, Impacts 08, October 2008] the author assessed the various methods and models currently in use in estimating the economic impact of event visitors, including lodging stays. A key point of the author's was that "all measurement of tourism activity is based on *estimates*...results are subject to differing levels of error depending on the methodology used, a fact which should be borne in mind when statistical interpretation is undertaken." Appendix D shows the Impact Reports Indicators List of metrics collected by various event tourism reports studied in the meta-analysis.

In the meta-analysis, Bond reports how the research team Cooper et al (2005, p. 95) state that the "exact values are normally not what is important and, bearing in mind the shortcoming, we can see that tourism statistics often represent the best estimates available."

Other findings of the meta-analysis include:

- The benefits to be gained from the data collected have to be weighed against the cost and time of enumeration.
- Ensuring regular, up-to-date returns from accommodation establishments can prove to be problematic when considered in the light of their other government data requirements.
- Event/visitor surveys are instrumental for estimating the total expenditure of visitors for lodging attributable to events.

Recommendations

To avoid any level of doubt, the SDTMD can specify that SDTMD-funded projects establish hotel blocks or online booking agencies as the means for projects measurement.

A second option is to accept random sample surveying of visitors at events/venues or by phone/mail/email to gauge SDTMD hotel stays, accepting the limits of statistical sampling. In these instances where definitive room nights are not known, and estimates are needed, survey sampling of event attendees can be used to estimate district room-night revenues for all attendees.

In addition, for campaign efforts without hotel blocks or online booking agencies as the means for measurement, the measurement of district hotel consumption can be estimated through surveys of the target markets.

Given the issues surrounding the online intercept survey methodology, the final recommendation is for the SDTMD to discuss the relevance of the metric for the purposes of the district's ROI measurement needs.

Support for Contractors' Analyses of ROI

Given the varying sizes and scopes of SDTMD-funded projects, the SDTMD can provide assistance to contractors to best measure ROI for SDTMD purposes. The Hospitality and Tourism Management Program at San Diego State University offers a means to conduct packaged room-night impact studies for grant recipients.

APPENDIX A

SDTMD FY2009 Funding Returns Based on Input

APPENDIX B

Analyses of ROI

San Diego Convention & Visitors Bureau

San Diego North Convention & Visitors Bureau

Note: The ConVis calculation also includes application of the San Diego North CVB
Estimated Room Nights Influenced by Websites metric

**Comparison of San Diego Convention Visitors Bureau and San Diego North Convention Visitors Bureau Base Program ROI Calculation
Fiscal Year End June 30, 2009**

ROI Comparisons	San Diego Convention & Visitors Bureau		San Diego North Convention & Visitors Bureau	
	% of Total Room Nights	ROI	% of Total Room Nights	ROI
Group Sales				
Definite Room Nights Booked				
TMD Allocation %				
TMD Room Nights	512,830	11%	28,259	17%
Average Daily Rate	\$ 145.00		\$ 141.00	
Total Room Night Revenue	\$ 74,360,350	22.18 : 1	\$ 3,984,519	4.39 : 1
Budgeted Sales Expense	\$ 3,352,053		\$ 907,171	
Marketing (including website)				
Estimated Total Room Nights Booked	559,505		-	
Definite Room Nights Booked on Websites	14,240		234 (b)	
Est. Room Nights Influenced by Website	3,042,691 (a)		282,217	
Total Marketing Room Nights	3,616,436		282,451	
TMD Allocation %	78.2% (c)		50.0% (d)	
TMD Base Room Nights	2,828,053		141,226	
TMD Incremental Room Nights	1,388,838 (e)		1,503 (e)	
Total Marketing Room Nights	4,216,891	89%	142,729	83%
Average Daily Rate	\$ 145.00		\$ 141.00	
Total Room Night Revenue	\$ 611,449,238	37.62 : 1	\$ 20,124,719	15.72 : 1
Reimbursed Marketing Expense	\$ 16,253,314 (f)		\$ 1,280,011 (g)	
Operations/Admin				
Budgeted Operations/Admin Exp	\$ 3,311,125		\$ 410,576	
Operations/Admin % of Base Funding	24%		16%	
Operations/Admin % of Total Funding	15%		16%	
Total				
Total Room Night Revenue	\$ 685,809,588		\$ 24,109,238	
Funding Reimbursed	\$ 22,916,492	29.93 : 1	\$ 2,597,758	9.28 : 1 (h)

(a) ConVis website room nights using SDNCVB methodology for website influence

(b) SDNCVB room nights booked on website per email from Cami to Lorin on January 25, 2010

(c) Actual City % of County TOT was 78.2% in FY2009

(d) Estimated % of total room nights represented by TMD hotels on the SDNCVB website

(e) Total number of room nights from incremental programs. ConVis excludes ASAE and AMGEN. SDNCVB includes AMGEN

(f) Includes Base plus all Incrementals minus ASAE and AMGEN spend

(g) Includes \$25,000 AMGEN spend

(h) Audited performance results for SDNCVB were calculated using the total SDTMD funds allocated for the organization for FY2009. A total of \$949,659 in SDTMD funding allocated to the SDNCVB during the audit period was not deployed. The ROI for the SDNCVB based on only deployed (spent) funds is approximately 14.70 to 1 (\$23,868,118/\$1,623,099)

APPENDIX C

Explanation of Confidence Levels and Sampling

Sampling is a procedure for estimating population values by measuring a subgroup (or sample) of the population. Any estimate of the true population based on sample data must contain some allowance for sampling variations. That is, a survey's percentage result is not an exact percentage, but is an estimate that contains a plus or minus variation. Developments in the theory of probability allow these variations to be measured statistically. The interval within which the sample value might deviate from the true population value is called the confidence interval or confidence region. The statistical measurement of the confidence interval is usually stated in a percentage and called a confidence level, e.g., 95% confidence level.

For example, if a survey shows that 20% of 400 respondents answer a question with a particular response. Statistical tests can be performed at a given confidence level (in this case we will use a 95% confidence level) to show that the survey result is 20% \pm 3.9 percentage points. That is, the chances are 95 out of 100 that the true population value lies in a range between 16.1% and 23.9%. Stated another way, if a random survey of 400 respondents produced a result of 20%, and if the survey were replicated 100 times, 95 of those times the result will fall in a range between 16.1% and 23.9%.

The plus or minus variation becomes the greatest when the response is 50%, and becomes progressively less as the response percentage approaches 99% or 1%. That is why it is often stated that a random sample size of 400 will yield a 95% confidence level "with a *maximum* margin of error" of 4.9 percentage points. In addition, the margin of error for any given confidence level becomes greater as the sample size is reduced, and becomes less as the sample size increases. That is why larger sample sizes are considered "more reliable," because the measurable margin of error becomes smaller.

A sample (or sub-sample) size may be indicated by a lowercase "n," which is a statistical connotation for sample size or base size upon which the percentages in that column are based. When the "n size" becomes small, caution should be taken as the plus or minus percentage points will be much greater than for the entire sample size.

APPENDIX D

Indicators Used in Major European Capital of Culture Impact Reports

Appendix: Indicators used in Major ECoC Impact Reports

Report \ Indicator	ERM Economics (2003) – <i>Impact Assessment of Liverpool's Bid</i>	Impacts 08 (2007) – <i>Baseline Report 2006/7</i>	Myerscough (1991) – <i>Monitoring Glasgow 1990</i>	Palmer/Rae Associates (2004) – <i>Report on ECOCs 1995-2004</i>	WTO (2005) – <i>City Tourism and Culture</i>	Palmer/Rae Associates (2007) – <i>Report on Lille 2004</i>
Bed-nights		✓	✓	✓	✓	✓
Number of hotel rooms		✓				
Hotel occupancy		✓	✓			✓
Number of hotel rooms built/ refurbished		✓				
Hotel average room rate		✓				
Visitor numbers	✓	✓	✓		✓	
Tourist trips involving attendance at event			✓			
Attendance at events		✓	✓			✓
Visits to museums, galleries, etc.			✓			✓
Tourist Office Enquiries			✓			✓
Rail Passengers						✓
Air Passengers						✓
Number of conferences & delegates		✓	✓			
Visitor expenditure	✓	✓	✓	✓		
Income effect	✓		✓			
Employment effect	✓	✓	✓			

Measure of bed-nights (or any other individual indicator) does not, however, cover full potential value of visitor impact; for example, bed-night calculations do not include recognition of same-day visitors and, given their significance in published Liverpool 08 documents, it is important that steps are taken for their identification and enumeration. As shown above, several comparative reports use visitor expenditure and, as a minimum, visitor expenditure should be estimated.