



ECONOMIC AND COMMUNITY IMPACT OF NATIONAL HERITAGE AREA SITES

ESSEX NATIONAL HERITAGE AREA

OIL REGION NATIONAL HERITAGE AREA

YUMA CROSSING NATIONAL HERITAGE AREA

ANHA
Celebrating 30 Years



TrippUmbach
Research • Strategy • Impact

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ECONOMIC AND COMMUNITY IMPACT OF NATIONAL HERITAGE AREA SITES:

Essex National Heritage Area, Oil Region National Heritage Area,
and Yuma Crossing National Heritage Area

TABLE OF CONTENTS

Map of National Heritage Areas	3
Introduction	4
Project Overview.....	5
Case Studies	8
Essex National Heritage Area (Essex Heritage)	9
Oil Region National Heritage Area (ORNHA).....	17
Yuma Crossing National Heritage Area (YCNHA)	24
Conclusion.....	31
Appendix A: Glossary of Terms	32
Appendix B: Research Methodology.....	33
Acknowledgements.....	39

This report has been prepared to provide information demonstrating the economic benefits supported by National Heritage Areas in the United States. Funding for this study was provided by **National Park Service Heritage Partnership Program Funds** dedicated to the Northeast Region Technical Assistance for Heritage Areas and also the Intermountain Region.

MAP OF NATIONAL HERITAGE AREAS



SITE	YEAR OF STUDY
★ Baltimore National Heritage Area (MD)	2012
★ Delaware & Lehigh National Heritage Corridor (PA)	2012
★ Essex National Heritage Area (MA)	2013
★ Hudson River Valley National Heritage Area (NY)	2012
★ John H. Chafee Blackstone River Valley National Heritage Area (MA & RI)	2012
★ Oil Region National Heritage Area (PA)	2013
★ Rivers of Steel National Heritage Area (PA)	2012
★ Wheeling National Heritage Area (WV)	2012
★ Yuma Crossing National Heritage Area (AZ)	2013

Introduction

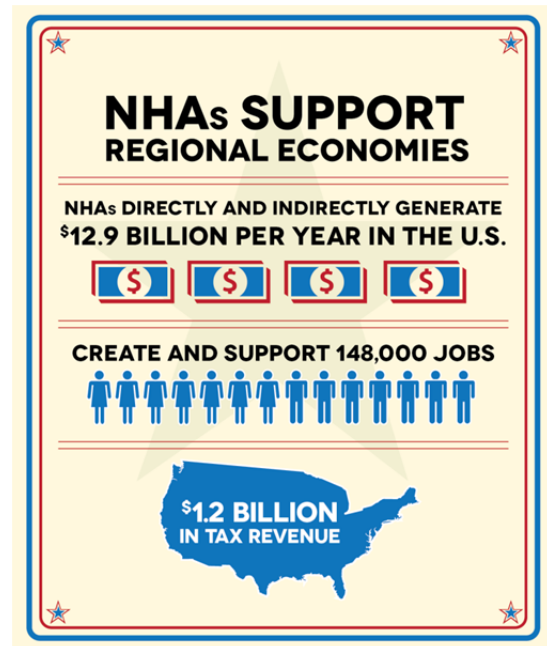
National Heritage Areas (NHAs) provide economic benefits to communities and regions through their commitment to heritage conservation and economic development. Through public-private partnerships, NHA entities support historic preservation, natural resource conservation, recreation, heritage tourism, and educational projects. Leveraging funds and long-term support for projects, NHA partnerships generate increased economic impact for regions in which they are located.

In 2012, Tripp Umbach completed a comprehensive economic impact study on six NHA sites in the Northeast Region that also included an extrapolation of the economic benefit of all 49 NHA

sites on the national economy. The annual economic impact was estimated to be **\$12.9 billion**. The economic activity supports approximately **148,000 jobs** and generates **\$1.2 billion** annually in Federal taxes from sources such as employee compensation, proprietor income, indirect business tax, households, and corporations.¹ This study seeks to further quantify the economic impacts of individual NHAs based upon a case study approach.²

The results presented in this NHA economic impact study are generated on an annual basis. The economic impact in future years can either be higher or lower based on the visitor or tourist data, number of employees, operational expenditures, and capital expansion. The economic impact of the three NHAs studied shows:

- **Essex National Heritage Area** (MA) generates **\$153.8 million** in economic impact, supports **1,832 jobs**, and generates **\$14.3 million** in tax revenue.
- **Oil Region National Heritage Area** (PA) generates **\$21.2 million** in economic impact, supports **314 jobs**, and generates **\$1.5 million** in tax revenue.
- **Yuma Crossing National Heritage Area** (AZ) **\$22.7 million** in economic impact, supports **277 jobs**, and generates **\$1.3 million** in tax revenue.



¹ In the same 2012 study, Tripp Umbach calculated the impact of the 21 current NHAs in the Northeast Region of the United States. This study revealed that the NHAs in the Northeast Region generate an annual economic impact of \$5.4 billion, support more than 66,880 jobs, and generate \$602.7 million in local and state taxes.

² Tripp Umbach. "The Economic Impact of National Heritage Areas: A Case Study Analysis of Six National Heritage Area Sites in the Northeast Region of the United States and Projections on the National Impact of All National Heritage Areas." www.nps.gov/history/heritageareas/.

Project Overview

In September 2013, Tripp Umbach was retained by the Heritage Development Partnership to measure the economic, employment, and government revenue impacts of operations and research of an additional three NHAs. The goals of the NHA economic impact study included the following:

- To quantify the economic and employment impacts of NHA operations on their individual NHA service areas utilizing the methodology used in the previous study.
- To demonstrate the broader community impact that NHAs have within their geographic areas of operation.

This study builds upon previous work completed to assess the economic benefit of NHAs to their regions, states, and local communities by measuring employment and revenue generation in addition to economic impacts. The research protocol included visits to each NHA site, roundtable discussions and interviews with key stakeholders within the three NHA regions, and data collection of existing NHA visitor estimates, operating budgets, and grant/capital awards information. The data collection process guided the economic impact analysis using IMPLAN³.

Each NHA profiled has distinct qualities and features, as noted in Table 1. The economic impact of an NHA will vary from site to site as each NHA is unique, operating in its local and state economy.

2013 NHA Study Overview

Study Period:
Three-Year Average for 2010, 2011, 2012

NHAs by Region:

- Essex National Heritage Area (Essex Heritage), Northeast Region
- Oil Region National Heritage Area (ORNHA), Northeast Region
- Yuma Crossing National Heritage Area (YCNHA), Intermountain Region

Geographical Areas:

- Essex Heritage – Essex County, MA
- ORNHA – Venango County, PA; eastern Crawford County, PA
- YCNHA – Yuma County, AZ

Methodology:
IMPLAN 2012 Data

Table 1: NHA Case Study Site Profiles					
Heritage Area	Size of the Region (sq. miles)	National Register Properties	National Historic Landmarks	National Park Units	Area Population, 2012 ⁴
Essex	500	9,968	26	2	755,618
Oil Region	708	3,270	1	0	62,167
Yuma Crossing	21	200	1	0	200,022

³ <https://implan.com/>

⁴ U.S. Census Bureau, State and County Quick Facts, 2012 estimate.

The size and shape of an NHA also plays a key role in defining its personality. Localized or **focused sites** such as YCNHA and ENHA are concentrated. While this leads to partnerships with more defined, common goals, it can place limitation on available resources. Sites such as ORNHA that span geographic areas (**multiple counties**) have the unique challenge of balancing where and how their resources are allocated. Finally, **corridor sites** that span multiple counties or states must serve as trusted collaborators to numerous partners spanning many varied interests. Despite all potential iterations of NHA types, the objectives of each NHA are connected by their Federal designation and mission.⁵ Similarities do exist and the impact study attempts to illustrate this by identifying the three areas (visitor, operational, and grantmaking) where NHAs have the greatest economic value to their local regions and states.

An additional area of consideration that distinguishes NHAs are the partnerships that they engage in. NHA partnerships are encouraged through initiatives that increase educational and recreational opportunities for both local residents and tourists. Increased visitation by tourists and the increased economic activity are important objectives of heritage areas. The partnership approach creates the opportunity for a diverse range of associates to voice a range of visions and perspectives. Partners collaborate to shape a plan and implement a strategy that focuses on the distinct qualities that make their region special. Partnerships among NHAs and their collaborators play a key role in leveraging federal investment.

Table 2: NHA Partnerships (2013)

Heritage Area	Formal Partnerships	Informal Partnerships
Essex National Heritage Area	168	1,328
Oil Region National Heritage Area	17	5
Yuma Crossing National Heritage Area	5	12

The variety of activities and heavy partner involvement makes evaluation of the heritage programs fairly challenging. Utilizing baseline information about visitor characteristics, awareness of heritage areas, visitor use patterns, and evaluations of programs and facilities provides a foundation for data collection. Estimates of visitor spending and local economic impacts help to position the heritage areas within the regional tourism market and local economy.

⁵ <http://www.nps.gov/history/heritageareas/FAQ/>

NHA Fast Facts

- *Since 1984, 49 National Heritage Areas (NHAs) have been designated by Congress.*
- *NHAs conserve nationally significant landscapes and promote and protect their natural, historic, cultural, and recreational resources.*
- *NHAs are affiliated with the National Park Service (NPS), and managed by independent Federal Commissions, non profit groups, or state or municipal authorities.*
- *NHAs strive to improve the quality of life in their regions by fostering the development of sustainable economies.*
- *NHA management entities collaborate with communities to determine how to make heritage relevant to local interests and needs.*

Key economic impact findings presented within the summary include the total projected impact (FY 2013), including the economic, employment, and state and local government revenue impact of each individual NHA in their respective state. The economic analysis completed for the operational and grantmaking impact uses actual expenditures and NHA employment to drive estimates of employment, income, tax revenue, and other economic variables.

Visitor and Tourism Expenditures: The economic impact of visitors to NHAs is the primary source of economic benefit quantified in this analysis. The direct consequence of visitor expenditures become business receipts, which in turn, are used to pay wages, salaries, and taxes. The initial direct round of spending ripples through the regional economy supporting additional economic benefits. Given the unique challenges of capturing visitor data by NHAs, the economic model includes local visitor estimates within the analysis.⁶ The visitor benefit analysis model clearly states an explicit relationship to overall visitor estimates reported by the NHAs and analysis of the visitor segments and their spending patterns. The model also estimates visitor expenditures.

Operational Expenditures: These expenditures are the economic impact of the NHA's organizational spending and staff. This refers to the day-to-day spending of the NHA to "get things done." Wages, rent, and professional fees paid by the NHA on an annual basis are included in this segment.

Grantmaking and Support Expenditures: The economic value of NHA-secured federal and state funding within the region primarily circulates through the economy in the form of knowledge transfer and increased salary amounts for organizations receiving the specific grant funding. Additional grant funding focused on capital and construction development is quantified as well. This segment includes the educational aspect of NHAs and the role that the staff has in serving as catalysts for economic development opportunities in the regions in which they operate.

⁶ The analysis of visitor spending includes local spending estimates.

NHAs also provide intangible benefits that are not able to be quantified. Knowledge sharing, facilitating collaborative partnerships, and increasing the quality of life are elements that each NHA brings to their communities. While these critical concepts that are not quantified within the context of this report, they are highlighted through qualitative data that was collected.

Case Studies

In order to gain a better understanding of the qualitative impact National Heritage Areas have on the regions they are located in, the Tripp Umbach project team conducted a series of visits and stakeholder interviews during December 2013 at each of the selected sites. Through small-group discussions or phone interviews, Tripp Umbach representatives interviewed community leaders and representatives of organizations that have knowledge of the mission of each NHA. These stakeholders were asked a series of questions to determine the strengths of the NHA and the most important key messages regarding the NHA's economic impact.

During the course of these interviews, several themes emerged across the board for all sites. NHAs serve as catalysts in their communities, taking on projects that otherwise may be overlooked or be considered too difficult to tackle. By encouraging collaboration and working with their partners to see projects through, NHAs increase quality of life for individuals living in these communities and provide unique destinations for visitors coming to these areas.

In addition, primary data was collected via a standardized data collection form. Data collected included: visitor data (primary data from actual reported visitor counts), operational and capital expenditure data, and grantmaking activities. From the primary data in concert with qualitative information stemming from site visits and stakeholder interviews, the economic and community impacts were calculated. The following provides the regional assets of each of the selected sites as described by the stakeholders in addition to the economic impact breakout for each specific NHA.

ESSEX NATIONAL HERITAGE AREA (ESSEX HERITAGE)

A. OVERVIEW OF ESSEX HERITAGE



ESSEX NATIONAL
HERITAGE AREA

Essex County, Massachusetts was settled nearly 400 years ago⁷ and is renowned for its rich history. The 500 square-mile region, with a 2012 population of 755,618, boasts an impressive 9,968 sites on the National Register of Historic Places⁸ and 26 National Historic Landmarks.⁹ History infuses every aspect of this region, including the strong tradition of independent units of local government. Towns date back to the earliest period of European colonialization and predate the formation of counties which now exist in name only. Most functions normally handled by county-level government in the rest of the United States are handled by town-level government in New England.¹⁰ Fire, police, schools, and almost all other public services are provided by the individual communities. As a consequence, Essex County is a region of extremes – home to some of the poorest cities in Massachusetts as well as some of the wealthiest towns.¹¹

The designation of the Essex National Heritage Area (Essex Heritage) and its non-profit management entity, the Essex National Heritage Commission, by the U.S. Congress in 1996 provided a framework for bringing the 34 communities of Essex County together on a voluntary basis and offered the means for intra-community cooperation on the development of new, meaningful and sustainable roles for the Area's nationally significant heritage resources. With the goal of generating economic and quality of life benefits for all, Essex Heritage works with a diverse range of public, private and non-profit partners on regional initiatives related to cultural tourism, recreational

"Spotlight" Project Trails & Sails

Developed to promote awareness of the Area's historic, cultural and natural assets, Trails & Sails is in its 12th year of offering free events to the public and providing economic opportunities for businesses in the heritage area.

A mix of walking and water tours throughout the urban and suburban areas of the region, Trails & Sails provides participants with a new way to experience sites that they otherwise may overlook. Since the program's inception in 2002, more than 41,000 people have attended events, and on average, 144 events are offered annually.

Volunteer engagement is a key component to the success of the event, with volunteers and staff giving 150,281 hours of their time. The total matched value of these events with volunteer hours included is \$1,521,802 since 2003.

⁷ <http://essexcountyma.net>

⁸ <http://www.essexheritage.org/about>

⁹ National Register Listings – <http://www.nps.gov/nhl/designations/Lists/MA01.pdf>

¹⁰ http://en.wikipedia.org/wiki/New_England_town

¹¹ Household Economic, Essex County, MA by Milan Budhathoki, GPH903 Class Project, Introduction to GIS http://w3.salemstate.edu/~mluna/projects/2010_09Fall/GPH903/BudhathokiEssexEconomics.pdf

trails, education, and heritage awareness. A central component of all its work is branding the region as a place to cherish as well as live, work, and visit.

The epicenter of the region's burgeoning tourism industry is the city of Salem, site of the infamous 1692 Salem Witch Trials. In the late 18th century, Salem was the sixth largest city in the United States and one of the wealthiest with its merchant ships pioneering international trade in ports in China, India, and Sumatra. The lasting impact of the global "China Trade" can still be seen today in the city's high-style Federal Period architecture and its numerous cultural institutions. Similar evidence of the region's maritime trade prowess can be found in other Area seaport communities such as Newburyport.

The public's fascination with the events of 1692 has driven, especially during the last 25 years, a lively tourism industry in Salem which peaks every October in witch parades, ghost tours, and haunted houses. While providing some short-term benefits, the "witch story" and its collateral activities for many years completely overshadowed the authentic history and strategically diverse year-round cultural tourism that the City of Salem and the surrounding area desired. With the establishment of Essex Heritage, along with the redevelopment of Salem Maritime National Historic Site and the expansion of the Peabody Essex Museum, the region's cultural tourism industry has finally come to the fore.

It is an economic fact that the longer a visitor stays, the greater the economic benefit to the region. Essex Heritage works in partnership with the regional tourism council and other destination management organizations to entice tourists to stay longer and experience the whole county. Through its development of the 90-mile, 14-community Essex Coastal Scenic Byway, Essex Heritage has helped to create a network of businesses that benefit from the mutual, cooperative pooling of marketing and visitor programs, where the whole benefits the sum of the parts. There is now a network of sites and organizations communicating and working together to exchange information and share best practices. Essex Heritage's promotion of a regional vision for the byway fosters a climate of mutual cooperation across town boundaries and between mission-similar organizations and business enterprises.

Recreational trail development is another area in which Essex Heritage is providing crucial leadership. Over the past decade, the organization has played a pivotal role in the development of regional bicycle and pedestrian trails linking 18 of the county's 34 communities. For example, development of the 30-mile, nine-community Border to Boston multi-use trail had been discussed for more than 30 years before Essex Heritage got involved and helped to facilitate long-term leases and early funding. The resulting local control and critical financial backing has led to the opening of 10 miles of well-used trail to date. Essex Heritage's regional vision and relationships with local, state, and federal governmental entities have been essential to the project's success. The implementation of a regional trail system is providing alternative modes of transportation, attracting more recreational enthusiasts – both residents and visitors,

stimulating growth in local spending and promoting healthy living regardless of socio-economic background. Importantly, the business community and municipal officials have come to appreciate and value new trails as very important public amenities.



Essex Heritage plays an important role in creating educational opportunities throughout the region such as the annual teacher workshop conducted with the National Park Service that instructs K-12 teachers in place-based education and community service projects. For example, many residents are unaware of the Area’s significant maritime history. With funding provided by Essex Heritage and through their partnership with the National Park Service in Salem, local school students are able to experience sailing on the historic replica privateer Schooner Fame, an exciting venture that connects the region’s youth with the heritage of the area.

For residents of Essex County, Essex Heritage concentrates on connecting people to the national heritage area by creating greater awareness of the Area’s resources and providing recreational, educational, and stewardship opportunities for experiencing them – in essence, introducing people to what is in their own backyard. Through innovative programs like Trails & Sails, Photo Safaris, and Featured Partners, Essex Heritage is growing the audience for the region’s heritage while also increasing volunteerism – a valuable role as demonstrated by a three-year average showing that 419 volunteers gave an average of 36 hours each. By linking with groups as diverse as the Boy Scouts and the Rotary Club, Essex Heritage makes a meaningful contribution to the work of others.

Essex Heritage serves as a catalyst for bringing people and organizations together and as a facilitator of cooperation across community boundaries and between like-minded organizations. There are many remarkable effects being felt in Essex County due to the work of this organization with its small, committed staff and extensive volunteer base. Essex Heritage gets things done and is very effective at getting the word out that the region has much to offer. The Essex National Heritage Area is something out of the ordinary for those who come to live, work, and play in the region, and it performs a crucial role by creating and sustaining a climate of collaboration that enables it and others to improve the region’s quality of life and drive economic growth.

B. OVERALL ECONOMIC IMPACT

The economic impact of the Essex National Heritage Area is **\$153.8 million annually**. This economic impact consists of three main components: tourism at **\$151.4 million**, operations at **\$2.2 million**, and grantmaking at **\$235,068**. (See Figure 1 and Table 3.)

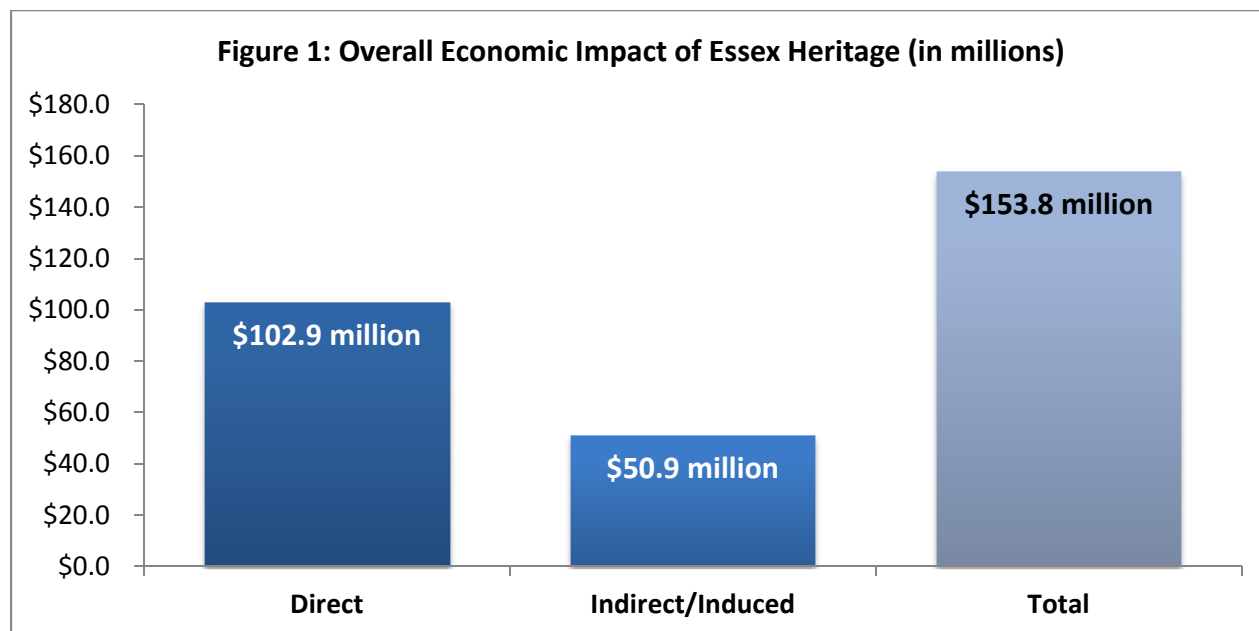


Table 3: Essex National Heritage Area – Overall Economic Impact				
	Direct Effect	Indirect Effect	Induced Effect	Total Effect*
Economic Impact	\$102,906,922	\$24,691,369	\$26,239,654	\$153,837,945
<i>Tourism</i>	<i>\$101,545,007</i>	<i>\$24,120,478</i>	<i>\$25,751,375</i>	<i>\$151,416,860</i>
<i>Operations</i>	<i>\$1,225,343</i>	<i>\$531,594</i>	<i>\$436,901</i>	<i>\$2,193,838</i>
<i>Grantmaking</i>	<i>\$140,128</i>	<i>\$41,102</i>	<i>\$53,837</i>	<i>\$235,068</i>

*Totals may not add due to rounding.

The table below shows the top 10 sectors by economic output in the Essex National Heritage Area impacted by Essex Heritage’s activities and visitors (See Table 4).

Table 4: Essex National Heritage Area – Top Economic Impact Sectors	
Industry	Economic Output
Food services and drinking places	\$40,365,858
Hotels and motels	\$39,456,026
Other amusement and recreation industries	\$13,948,096
Retail Stores - General merchandise	\$5,656,874
Real estate establishments	\$4,739,488
Imputed rental activity for owner-occupied dwellings	\$4,295,312
Retail Stores Food and beverage	\$3,788,426
Retail Stores - Gasoline stations	\$2,412,836
Monetary authorities and depository credit intermediation activities	\$2,051,545
Advertising and related services	\$1,962,457

The components of the economic impact are broken out below.

C. TOURISM IMPACT

The effects of visitation and tourism have the greatest economic benefit for the regions in which NHAs operate. NHAs play a substantial role in supporting and encouraging tourism within their regions. Tourism numbers are calculated by Essex Heritage’s regional partners. The three-year average total of visitors and tourists to the Essex Heritage service area was approximately **1,213,325 visitors**.¹² These visitors spend money in the region, creating a positive ripple effect on the economic structure. Based on the annual average number of visitors to the NHA region and its partner sites, more than **\$151.4 million** in economic benefit was supported annually within the region and state.

Visitor Segment	% of Total Visitation*	Direct Effect	Indirect Effect	Induced Effect	Total Effect*
Local Day	29%	\$ 7,751,839	\$ 1,591,373	\$ 2,298,423	\$11,641,634
Non Local Day	40%	\$17,630,127	\$3,557,587	\$5,285,511	\$26,473,225
Overnight	31%	\$76,163,040	\$ 18,971,518	\$ 18,167,442	\$113,302,000
Total	100%	\$101,545,007	\$24,120,478	\$25,751,375	\$151,416,860

**Totals may not add due to rounding.*

The economic spending analysis demonstrates that visitors traveling from outside the region who stay overnight represent the largest economic benefit to the economy of the local region and the state. Although overnight visitors only comprise an estimated 31% of NHA visitation, overnight visitors account for approximately 75% of the economic benefit of NHAs. This is primarily driven by the increased amount of fresh dollars from outside the region spent on lodging, accommodations, restaurants, transportation, etc.

D. OPERATIONAL IMPACT

In addition to attracting visitors and promoting tourism in the region, the analysis quantifies the economic benefit of Essex Heritage through its operating activities. This impact is represented by the spending of the organization and the employees it supports. Although not as great as the impact of tourism and visitation on the regional economy, the intellectual benefits and resources of NHA staff serve as independent catalysts for their regional economy.

	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Operations	\$1,225,343	\$531,594	\$436,901	\$2,193,838

¹² Annual tourism projections were utilized from 2010, 2011, and 2012.

E. CAPITAL/GRANTMAKING

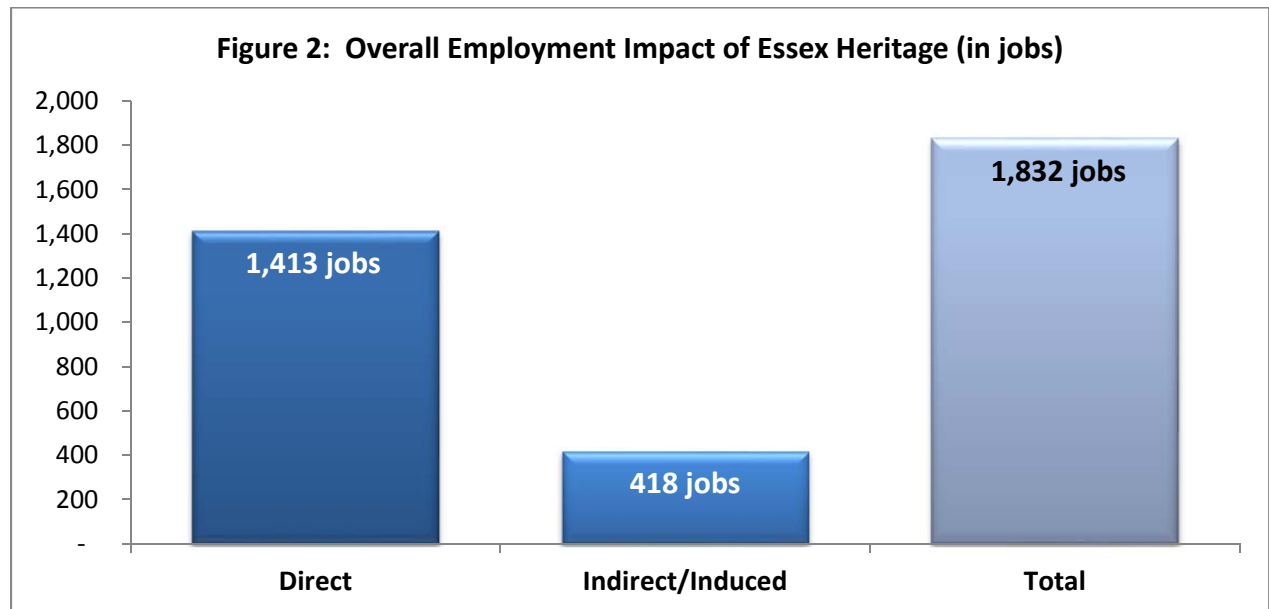
Essex Heritage is active in the region as a grantmaking organization. Grant opportunities are provided by NHAs to regional partners for collaborative projects aligned with the educational, preservation, promotional, and economic development missions of NHAs. Similar to how tourism and operations support economic activity within the region, grantmaking provides an infusion of funds to assist with the development of projects. Grants are quantified as increased salary or as specific capital investment provided by the NHA within their region.¹³

	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Capital/Grantmaking	\$140,128	\$41,102	\$53,837	\$235,068

F. OVERALL EMPLOYMENT IMPACT

Essex Heritage supports a substantial number of jobs in the region. The total employment impact is **1,832 jobs** (1,413 direct jobs and 418 indirect/induced jobs). Direct jobs are based on business receipts, which in turn, are used to pay wages and salaries within industries such as food services, retail, and lodging.

Indirect or induced jobs are supported in the region by local businesses spending part of their receipts on goods and services they require to serve customers, including investment in new equipment and structures. This is the ripple effect of economic activity attributed to NHAs.



¹³ Grants not affiliated with capital improvements or construction are included in the input-output model as salary, and therefore, have no direct or indirect economic effects associated with them. This protocol exhibits a conservative estimate on the regional effects of grants facilitated by the NHA.

	Direct Effect*	Indirect Effect	Induced Effect	Total Effect
Employment Impact	1,413 jobs	190 jobs	228 jobs	1,832 jobs
<i>Tourism</i>	<i>1,385 jobs</i>	<i>185 jobs</i>	<i>224 jobs</i>	<i>1,785 jobs</i>
<i>Operations</i>	<i>27 jobs</i>	<i>5 jobs</i>	<i>4 jobs</i>	<i>36 jobs</i>
<i>Capital/Grantmaking</i>	<i>1 job</i>	<i>0 jobs</i>	<i>0 jobs</i>	<i>2 jobs</i>

**Totals may not add due to rounding.*

The “Top Employment Sectors” table illustrates the sectors with the largest number of jobs (includes direct, indirect, and induced) supported by Essex Heritage. Industries such as food services, hotels, and retail stores represent the largest number of jobs while the ripple effect illustrates that jobs in real estate and building services are also supported by the spending attributable to Essex Heritage. (See Table 9).

Industry	Jobs
Food services and drinking places	674 jobs
Hotels and motels	316 jobs
Other amusement and recreation industries	238 jobs
Retail Stores - General merchandise	113 jobs
Retail Stores - Food and beverage	83 jobs
Retail Stores - Gasoline stations	34 jobs
Grant making, giving, and social advocacy organizations	30 jobs
Real estate establishments	24 jobs
Services to buildings and dwellings	23 jobs

G. GOVERNMENT REVENUE IMPACT

NHAs also support state and local governments with the generation of government revenue or tax revenue. As a result of Essex Heritage’s work to attract visitors and its operations, the tourism industry within the heritage area generates **\$14.3 million** in tax revenue annually.

Table 10: State and Local Government Revenue Impact				
Description	Employee Compensation	Tax on Production and Imports	Households	Corporations
Dividends				\$12,335
Social Ins Tax- Employee Contribution	\$29,415			
Social Ins Tax- Employer Contribution	\$57,832			
Tax on Production and Imports: Sales Tax		\$4,097,589		
Tax on Production and Imports: Property Tax		\$6,780,256		
Tax on Production and Imports: Motor Vehicle License		\$94,665		
Tax on Production and Imports: Severance Tax				
Tax on Production and Imports: Other Taxes		\$505,052		
Tax on Production and Imports: S/L Non Taxes		\$42,500		
Corporate Profits Tax				\$474,885
Personal Tax: Income Tax			\$1,762,553	
Personal Tax: Non Taxes (Fines- Fees)			\$315,255	
Personal Tax: Motor Vehicle License			\$43,502	
Personal Tax: Property Taxes			\$28,851	
Personal Tax: Other Tax (Fish/Hunt)			\$4,219	
Total State and Local Tax	\$87,247	\$11,520,061	\$2,154,379	\$487,220
			Overall Total	\$14,248,907

OIL REGION NATIONAL HERITAGE AREA (ORNHA)

A. OVERVIEW OF ORNHA



Granted State designation in 1994, with Federal designation following 10 years later in 2004, Oil Region National Heritage Area (ORNHA) has taken the lead of preserving the region's industrial past and promoting the region's natural assets. ORNHA is uniquely positioned due to falling under the umbrella of the Oil Region Alliance (ORA), the designated lead economic, heritage, and tourism development group¹⁴ for Venango and eastern Crawford County in rural Northwestern Pennsylvania. They have naturally formed relationships with a multitude of organizations and in this area, it is imperative to develop partnerships. ORNHA is always thinking about creating networks, whether it is through the engagement of local residents as volunteers or by partnering with like-minded agencies. Collaborating has become a mindset in advancing the region's economic development and figuring out how to include recreational activities as well. The overall mission of the ORA is to encourage people to move to the area through the creation of jobs and housing, as well as to entice visitors to come to the area to learn about the rich history and enjoy a multitude of recreational opportunities. By turning to what is already here, this asset-based economic development is the cornerstone to the success of the ORA and ORNHA.

Working in line with the idea that without a past you have no future, ORNHA has been able to uphold their duty as good stewards to allow them to continue telling the story of the role that this whole region played as the birthplace of the world's commercial petroleum industry. One of the ways that ORNHA has been able to do this is through a partnership with the Pennsylvania Department of Conservation and Natural Resources. By having an audience that will come to enjoy the area's natural resources through

"Spotlight" Project Oil 150 Celebration

In 2009, to observe the 150th anniversary of the Drake Well discovery, ORNHA and its partners launched Oil 150. This marketing program was geared to educate local, national, and international audiences that would otherwise be unaware of the significance of this region.

The Oil 150 team arranged various events throughout the region, produced a Public Broadcast System documentary that was distributed to all local schools and all state libraries, developed a website chronicling the celebration, and assembled a kit that was sent to 150 museums across the nation. Each kit contained documentaries, books, and promotional items relating to the celebration in addition to an educator's guide and reference materials.

Oil 150 Celebration has left permanent legacy through the educational impacts that are still being felt today by spreading the word of the Birthplace of the Oil Industry.

¹⁴ <http://www.oilregion.org/>

hiking, biking, fishing, and kayaking, ORNHA is able to broaden their base by engaging these individuals and weaving their activities into the heritage area. Relics and equipment left behind from the oil boom tell the history of the area through interpretive signage that is included along trail paths. ORNHA has been a champion in extending trails throughout the region and due to their efforts, trail users can explore these areas and visualize what was being done 150 years ago. Preservation has been vitally important to this region and ORNHA truly recognizes this and work hard to develop sites to bring people to this region. Coming to this region allows visitors to walk back into history and interpret and appreciate the history of the area while enjoying the natural resources as well.



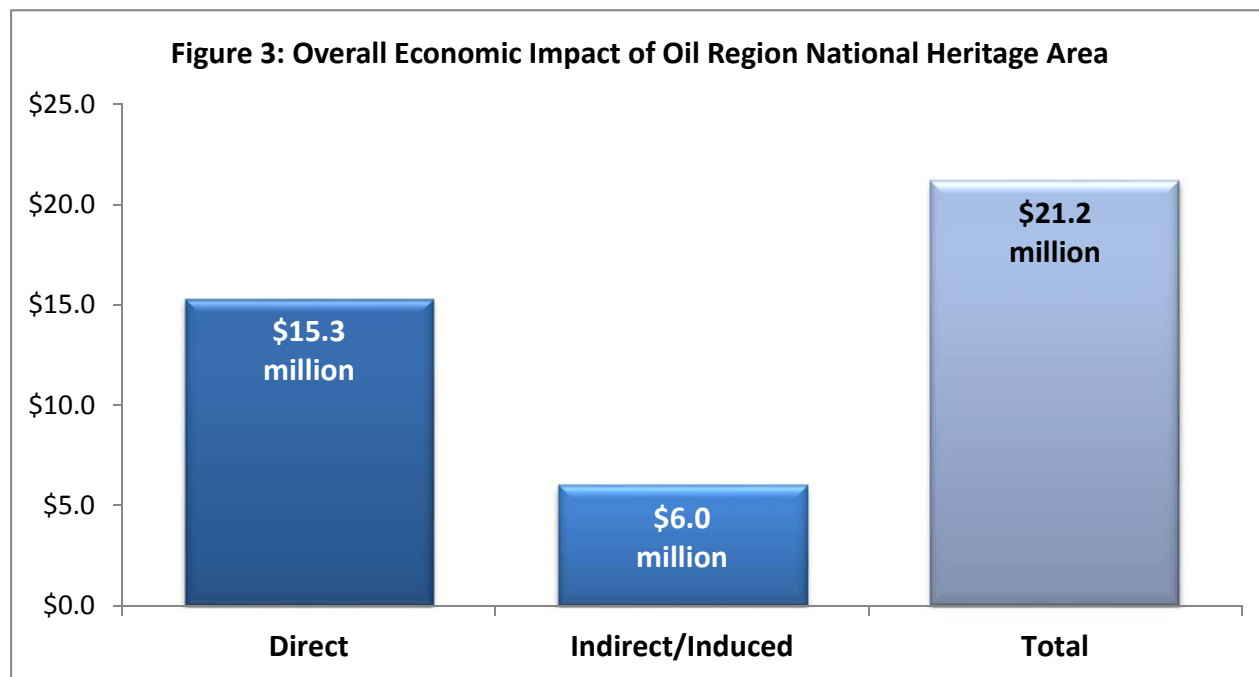
ORNHA has also championed preserving several historic buildings in the region. The Coal Oil Johnny House and the Ida Tarbell House, both learning labs of preservation for ORNHA staff, volunteers, and community members, are now used for public tours and cultural events. The Neilltown Church had been in jeopardy of being torn down but was offered to ORNHA which then obtained grants to rehabilitate it. ORNHA now holds free concerts performed at the church during the summer months. Furthermore, another area of preservation that ORNHA has been essential to is being the steward for a massive collection of natural gas history items, mostly specific to this region, which will be used as foundations for traveling exhibits to take on a

national level. Without the ORNHA’s existence, these items would not be part of a historic catalog. The richness of the area is able to be showcased by the jewels that have survived and been preserved.

ORNHA is viewed as a substantial value to the area in many facets. They support regional efforts by encouraging partners to draw on each other to create success. Partners also rely on the designation of being part of a NHA as being critical in terms of branding. Moreover, residents of the area take ownership and have pride in the area. Part of the buy-in is that people feel so involved in the ORNHA. There is an attractiveness of being part of the area’s historical significance; people want to belong and they get that here. In fact, a three-year average of volunteerism shows that 202 volunteers gave an average of 20 hours each. Residents and visitors alike have broadened their perspective and see history and recreation come together here. By identifying opportunities to augment, support, then market, ORNHA funds significant projects that benefit the region with lasting economic impact for the future.

B. OVERALL ECONOMIC IMPACT

The economic impact of ORNHA is **\$21.2 million annually**. This economic impact consists of three main components: tourism at **\$19.4 million**, operations at **\$1.3 million**, and grantmaking/capital activities at **\$511,474**. (See Figure 3 and Table 11)



	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Economic Impact	\$15,267,589	\$2,925,713	\$3,042,821	\$21,236,123
<i>Tourism</i>	<i>\$14,144,073</i>	<i>\$2,645,299</i>	<i>\$2,600,668</i>	<i>\$19,390,038</i>
<i>Operations</i>	<i>\$781,119</i>	<i>\$186,628</i>	<i>\$366,863</i>	<i>\$1,334,610</i>
<i>Capital/Grantmaking</i>	<i>\$342,398</i>	<i>\$93,785</i>	<i>\$75,291</i>	<i>\$511,474</i>

**Totals may not add due to rounding.*

The table below shows the top 10 sectors in the NHA region impacted by ORNHA's activities and visitors (See Table 12).

Industry	Economic Output
Food services and drinking places	\$5,626,128
Hotels and motels	\$5,542,131
Other amusement and recreation industries	\$1,941,562
Retail Stores - General merchandise	\$810,276
Grantmaking, giving, and social advocacy organizations	\$1,135,813
Retail Stores - Food and beverage	\$487,669
Retail Stores Gasoline stations	\$351,583

Industry	Economic Output
Services to buildings and dwellings	\$205,377
Construction of other new nonresidential structures	\$342,398
Employment services	\$78,155

The components of the economic impact are broken out below.

C. TOURISM IMPACT

The effects of visitation and tourism have the greatest economic benefit for the regions in which NHAs operate. NHAs play a substantial role in supporting and encouraging tourism within their regions. Tourism numbers are calculated by ORNHA’s regional partners. The three-year average total of visitors and tourists to the ORNHA region was approximately **169,033 visitors**.¹⁵ These visitors spend money in the region, creating a positive ripple effect on the economic structure. Based on the annual average number of visitors to the NHA region and its partner sites, **\$19,390,038** in economic benefit was supported annually within the region and state.

Visitor Segment	% of Total Visitation*	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Local Day	29%	\$1,077,383	\$149,276	\$242,229	\$1,468,887
Non Local Day	40%	\$2,456,119	\$338,460	\$552,569	\$3,347,148
Overnight	31%	\$10,610,571	\$2,157,563	\$1,805,870	\$14,574,003
Total	100%	\$14,144,073	\$2,645,299	\$2,600,668	\$19,390,038

**Totals may not add due to rounding.*

The economic spending analysis demonstrates that visitors traveling from outside the region who stay overnight represent the largest economic benefit to the economy of the local region and the state. Although overnight visitors only comprise an estimated 31% of NHA visitation, overnight visitors account for approximately 75% of the economic benefit of NHAs. This is primarily driven by the increased amount of fresh dollars from outside the region spent on lodging, accommodations, restaurants, transportation, etc.

D. OPERATIONAL IMPACT

In addition to attracting visitors and promoting tourism in the region, the analysis quantifies the economic benefit of ORNHA through its operating activities. This impact is represented by the spending of the organization and the employees it supports. Although not as great as the impact of tourism and visitation on the regional economy, the intellectual benefits and resources of NHA staff serve as independent catalysts for their regional economy.

¹⁵ Annual tourism projections were utilized from 2010, 2011, and 2012.

	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Operations	\$781,119	\$186,628	\$366,863	\$1,334,610

E. CAPITAL/GRANTMAKING

ORNHA is active in the region as a grantmaking organization. Grant opportunities are provided by NHAs to regional partners for collaborative projects aligned with the educational, preservation, promotional, and economic development missions of NHAs. Similar to how tourism and operations support economic activity within the region, grantmaking provides an infusion of funds to assist with the development of projects. Grants are quantified as increased salary or as specific capital investment provided by the NHA within their region.¹⁶

	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Capital/Grantmaking	\$342,398	\$93,785	\$75,291	\$511,474

F. OVERALL EMPLOYMENT IMPACT

ORNHA supports a substantial number of jobs. The total employment impact is **314 jobs** (254 direct jobs and 59 indirect/induced jobs). Direct jobs are based on business receipts which in turn are used to pay wages and salaries within industries such as food services, retail, and lodging.

Indirect or induced jobs are supported in the region by local businesses spending part of their receipts on goods and services they require to serve customers, including investment in new equipment and structures. This is the ripple effect of economic activity attributed to NHAs.

The “Top Employment Sectors” table illustrates the sectors with the largest number of jobs (includes direct, indirect and induced) supported by the NHA. Industries such as food services, hotels and retail stores represent the largest number of jobs while the ripple effect illustrates that jobs in real estate and employment services are also supported by the spending attributable to NHAs.

¹⁶ Grants not affiliated with capital improvements or construction are included in the input-output model as salary and therefore have no direct or indirect economic effects associated with them. This protocol exhibits a conservative estimate on the regional effects of grants facilitated by the NHA.

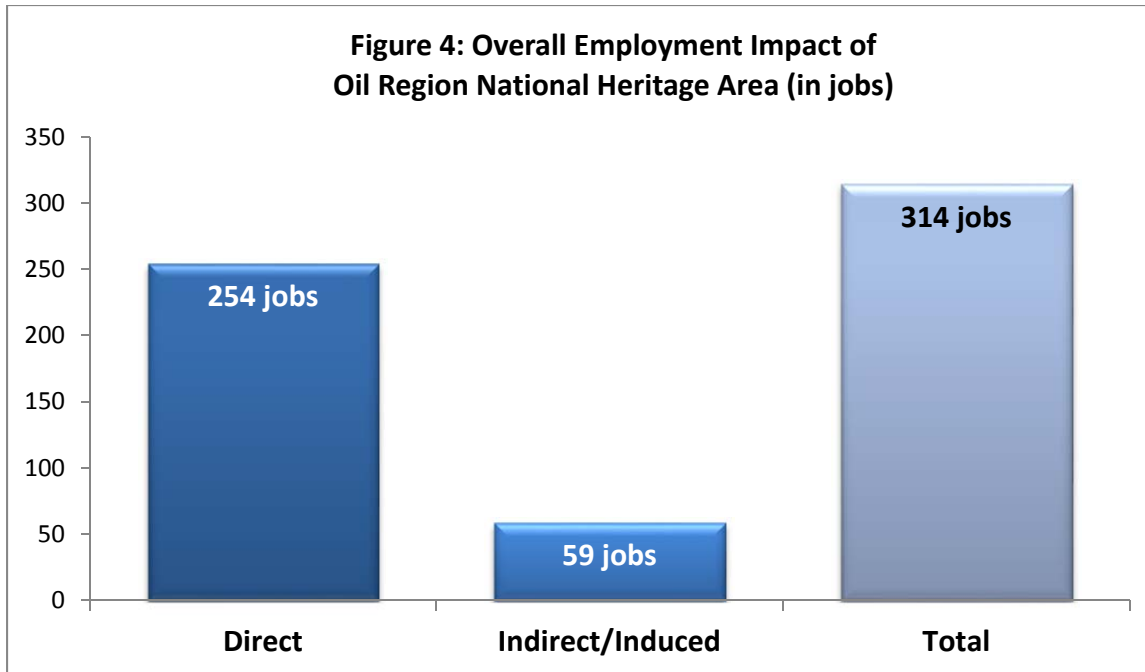


Table 16: Oil Region National Heritage Area –Overall Employment Impact

	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Employment Impact	254 Jobs	29 Jobs	30 Jobs	314 Jobs
<i>Tourism</i>	<i>238 Jobs</i>	<i>26 Jobs</i>	<i>26 Jobs</i>	<i>290 Jobs</i>
<i>Operations</i>	<i>13 Jobs</i>	<i>2 Jobs</i>	<i>4 Jobs</i>	<i>19 Jobs</i>
<i>Capital/Grantmaking</i>	<i>3 Jobs</i>	<i>1 Job</i>	<i>1 Job</i>	<i>5 Jobs</i>

**Totals may not add due to rounding.*

The table below shows the top 10 employment sectors impacted by ORNHA. (See Table 17)

Table 17: Oil Region National Heritage Area – Top Employment Impact Sectors

Industry	Jobs
Food services and drinking places	107
Hotels and motels	65
Other amusement and recreation industries	45
Retail Stores General merchandise	16
Grantmaking, giving, and social advocacy organizations	14
Retail Stores Food and beverage	11
Retail Stores - Gasoline stations	6
Construction of other new nonresidential structures	2
Electric power generation, transmission, and distribution	1
Imputed rental activity for owner occupied dwellings	0

G. GOVERNMENT REVENUE IMPACT

NHAs also support state and local governments with the generation of government revenue or tax revenue. As a result of ORNHA’s work to attract visitors and its operations, the tourism industry within the heritage area generates **\$1.5 million** in tax revenue annually. ORNHA provides a strong return on investment for National Park Service funding. In the past three years, ORNHA has expended/invested an average of \$360,284 in NPS funds in the area. Based on these expenditures and the attraction of tourists to the region, **\$4.25** in state and local tax revenue has been generated for every federal dollar invested.

Table 18: State and Local Government Revenue Impact				
Description	Employee Compensation	Tax on Production and Imports	Households	Corporations
Dividends				\$1,158
Social Ins Tax- Employee Contribution	\$4,210			
Social Ins Tax- Employer Contribution	\$8,277			
Tax on Production and Imports: Sales Tax			\$636,583	
Tax on Production and Imports: Property Tax			\$563,759	
Tax on Production and Imports: Motor Vehicle Licenses			\$11,563	
Tax on Production and Imports: Severance Tax				
Tax on Production and Imports: Other Taxes			\$103,030	
Tax on Production and Imports: S/L Non Taxes			\$5,768	
Corporate Profits Tax				
Personal Tax: Income Tax				\$126,646
Personal Tax: Non Taxes (Fines- Fees)				\$20,520
Personal Tax: Motor Vehicle License				\$5,096
Personal Tax: Property Taxes				\$2,328
Personal Tax: Other Tax (Fish/Hunt)				\$2,827
Total State and Local Tax	\$12,487		\$1,320,704	\$157,418
			Overall Total	\$1,531,211

YUMA CROSSING NATIONAL HERITAGE AREA (YCNHA)

A. OVERVIEW OF YCNHA



Designated in 2000, Yuma Crossing National Heritage Area (YCNHA) has thrived under creative and effective vision and leadership, becoming a key organization in this ever-growing region, producing tangible results that have improved the community as a whole. While the Colorado

River, the focal point of this community, has continued to shrink, the population of Yuma County has surged from 160,000 residents in 2000 to over 200,000 in 2012.¹⁷ It is during this time of population growth that the YCNHA grew to become the nexus of the community, bringing together a multitude of partners including business and tribal leaders, economic organizations, city, county, and federal government representatives, and members of the agricultural community to focus on improving recreation, economic development, and historic preservation.

For decades, this region struggled to gain a sense of identity. However, by looking to the natural asset of the Colorado River and connecting the city back to the riverfront through the work of the YCNHA, the area has regained its identity, and downtown Yuma and the surrounding riverfront area is becoming a destination and a place to show off. Riverfront revitalization is also serving as an avenue to draw new residents and tourists to Yuma and existing residents to the downtown area. By promoting the riverfront as an amenity and working with retailers, industrial employers, and agriculture organizations, there is improved ability to attract businesses and their leadership to Yuma.

Furthermore, YCNHA provided steady support to the developer of the riverfront to move ahead with the redevelopment, even during the height of the recession several years ago. Without the riverfront improvements provided within the NHA, it would have been difficult to attract a nationally flagged hotel and develop the Pivot Point Conference Center that has served as an

“Spotlight” Project West Wetlands Park

Once used as the city landfill, the riverfront area had been an asset that was not being utilized by the community. Years of neglect resulted in the area being overtaken by non native species and allowed for a drifter community to thrive.

By raising \$5 million, YCNHA was able to cover the area with clean fill, combat the non native species, and remove the blight. The park now features a series of trails, a playground, is used for a variety of outdoor activities, and is a hub for bird watching enthusiasts.

The psychological impact of having these recreational opportunities available has elevated the quality of life for community members across all socio economic backgrounds.

¹⁷ U.S. Census Bureau, State and County Quick Facts, 2012 estimate.

economic driver for the area. Investment partners from other states and areas of the country can be encouraged to invest here, due to the designation of YCNHA and the support they provide to ensure that projects get completed.



Along with the revitalization efforts that have been put forth, there has also been a large push to increase recreational opportunities for residents and visitors that has been shepherded by YCNHA. Between the East and West Wetlands, there is now a system of bike and walking paths. The city was not welcoming to this in the past but now embraces these efforts, as it promotes a culture of a healthy area. It is also believed that the trails and revitalization will spur more businesses to come into town. Additionally, YCNHA is primarily responsible in organizing and attracting interest in holding events in the region including Lettuce Days and the Dorothy Young Memorial Parade, as well as running and biking events. Volunteers play an important role.

Volunteers are integral to the success of these events and projects and a three-year average of volunteerism shows that 53 volunteers gave an average of 37 hours each.

Finally, YCNHA has provided a more organized source of data on the history of the Yuma Crossing and its long-term impact to the history of Yuma. Realizing the value in preserving the area's historical assets, YCNHA stepped in when two state parks, the Yuma Territorial Prison and the Yuma Quartermaster Depot, were set to close to the public in 2010 due to severe state budget cuts that had the parks running at a deficit. By rallying the community, YCNHA raised \$70,000 in 60 days to keep these parks open and now, through YCNHA, are run through an operating lease with city and have improved visitation numbers. Many people visiting the area had not been aware of how important the area had been to the early history of the West, but now through updated exhibits at the Prison and innovative vision of using the Quartermaster Depot to discuss the past, present, and future of the Colorado river, they are able to appreciate the significance of Yuma's past.

The landscape of the area is changing for the better, something that did not seem achievable 20 years ago. However, by taking one step at a time, Yuma Crossing National Heritage Area has been able to overcome those obstacles by using their vision to achieve goals. Through their expertise in finding money and taking a small amount and turning it into a large amount, they are leveraging funds successfully. They serve as a facilitator for entitlements that need to be put in place for all the development work that has been done. The establishment of the

heritage area and having the resources to secure grant funding for the area has played significant part in making this region attractive to private capital and helps investors to be able to take risks. Also, due to the strength and staff in the Heritage Area team, coordination has been improved between government and the private sector. The success of past and current YCNHA initiatives continues to breed momentum for others to invest, support, and build strength in community and look toward a positive future.

B. OVERALL ECONOMIC IMPACT

The economic impact of YCHNA is **\$22.7 million annually**. This economic impact consists of three main components: tourism at **\$16.4 million**, operations at **\$4.0 million**, and grantmaking/capital activities at **\$2.3 million**. (See Figure 5 and Table 19)

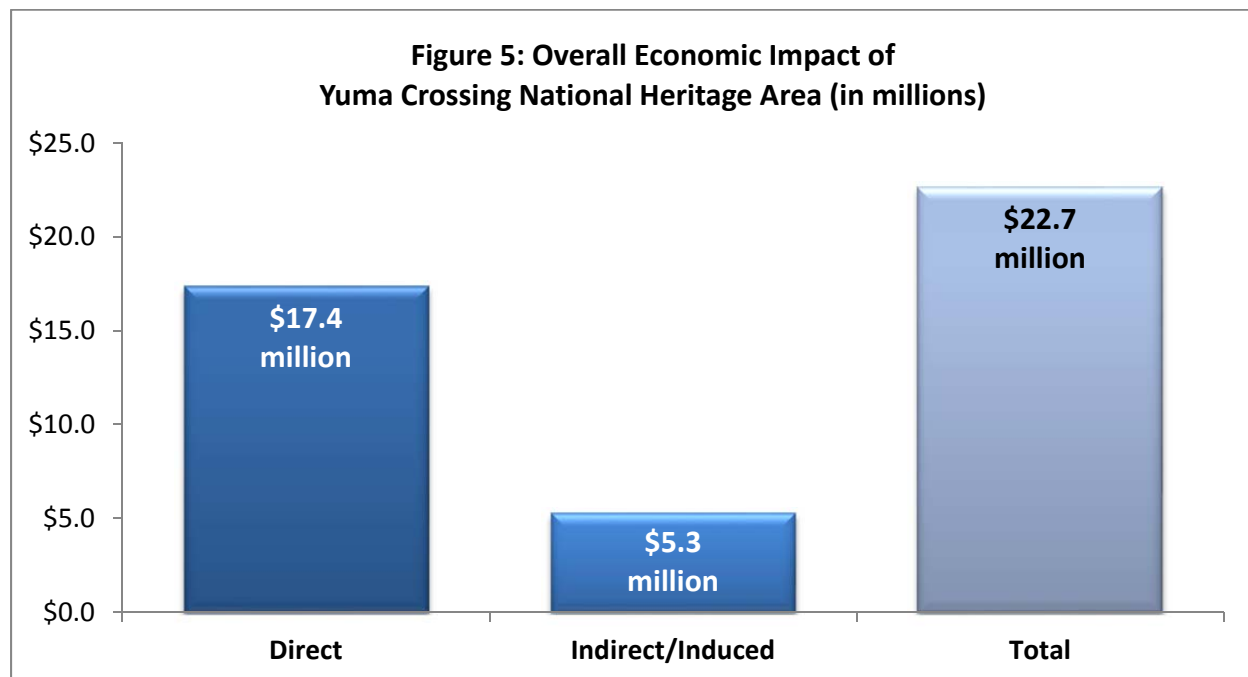


Table 19: Yuma Crossing National Heritage Area – Overall Economic Impact				
	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Economic Impact	\$17,406,366	\$2,680,359	\$2,584,993	\$22,671,718
<i>Tourism</i>	<i>\$12,565,959</i>	<i>\$1,817,563</i>	<i>\$1,978,712</i>	<i>\$16,362,234</i>
<i>Operations</i>	<i>\$3,146,966</i>	<i>\$524,226</i>	<i>\$370,133</i>	<i>\$4,041,325</i>
<i>Capital/Grantmaking</i>	<i>\$1,693,441</i>	<i>\$338,571</i>	<i>\$236,148</i>	<i>\$2,268,159</i>

The table below shows the top 10 sectors in the NHA region impacted by YCHNA’s activities and visitors. (See Table 20)

Industry	Economic Output
Food services and drinking places	\$5,018,825
Hotels and motels, including casino hotels	\$4,884,736
Grantmaking, giving, and social advocacy organizations	\$3,178,539
Other amusement and recreation industries	\$1,717,869
Construction of other new nonresidential structures	\$1,693,441
Retail Stores - General merchandise	\$752,614
Imputed rental activity for owner occupied dwellings	\$613,738
Retail Stores - Food and beverage	\$467,056
Retail Stores Gasoline stations	\$317,866
Private hospitals	\$249,932

The components of the economic impact are broken out below.

C. TOURISM IMPACT

The effects of visitation and tourism have the greatest economic benefit for the regions in which NHAs operate. NHAs play a substantial role in supporting and encouraging tourism within their regions. Tourism numbers are calculated by YCNHA’s regional partners. The three-year average total of visitors and tourists to the YCNHA region was approximately **150,151 visitors**.¹⁸ These visitors spend money in the region, creating a positive ripple effect on the economic structure. Based on the annual average number of visitors to the NHA region and its partner sites, more than **\$16.4 million** in economic benefit was supported annually within the region and state.

Visitor Segment	% of Total Visitation*	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Local Day	29%	\$958,869	\$94,959	\$173,304	\$1,227,133
Non Local Day	40%	\$2,181,763	\$215,819	\$395,621	\$2,793,204
Overnight	31%	\$9,425,327	\$1,506,784	\$1,409,786	\$12,341,897
Total	100%	\$12,565,959	\$1,817,562	\$1,978,711	\$16,362,234

**Totals may not add due to rounding.*

The economic spending analysis demonstrates that visitors traveling from outside the region who stay overnight represent the largest economic benefit to the economy of the local region and the state. Although overnight visitors only comprise an estimated 31% of NHA visitation, overnight visitors account for approximately 75% of the economic benefit of NHAs. This is primarily driven by the increased amount of fresh dollars from outside the region spent on lodging, accommodations, restaurants, transportation, etc.

¹⁸ Average annual tourism projections were utilized from 2010, 2011, and 2012.

D. OPERATIONAL IMPACT

In addition to attracting visitors and promoting tourism in the region, the analysis quantifies the economic benefit of YCNHA through its operating activities. This impact is represented by the spending of the organizations and the employees it supports. Although not as great as the impact of tourism and visitation on the regional economy, the intellectual benefits and resources of NHA staff serve as independent catalysts for their regional economy.

	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Operations	\$3,146,966	\$524,226	\$370,133	\$4,041,325

E. CAPITAL/GRANTMAKING

YCNHA is active in the region with its capital projects and collaboration with its regional partners for projects aligned with the educational, preservation, promotional, and economic development missions of NHAs. Similar to how tourism and operations support economic activity within the region, capital projects/grantmaking provides an infusion of funds to assist with the development of the NHA. For the purposes of this study, grants are quantified as increased salary or as specific capital investment provided by the NHA within their region.¹⁹

	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Capital/Grantmaking	\$1,693,441	\$338,571	\$236,148	\$2,268,159

F. OVERALL EMPLOYMENT IMPACT

YCNHA supports a substantial number of jobs in the region. The total employment impact is **277 jobs** (226 direct jobs and 51 indirect/induced jobs). Direct jobs are based on business receipts which in turn are used to pay wages and salaries within industries such as food services, retail, and lodging.

Indirect or induced jobs are supported in the region by local businesses spending part of their receipts on goods and services they require to serve customers, including investment in new equipment and structures. This is the ripple effect of economic activity attributed to NHAs.

¹⁹ Grants not affiliated with capital improvements or construction are included in the input-output model as salary and therefore have no direct or indirect economic effects associated with them. This protocol exhibits a conservative estimate on the regional effects of grants facilitated by the NHA.

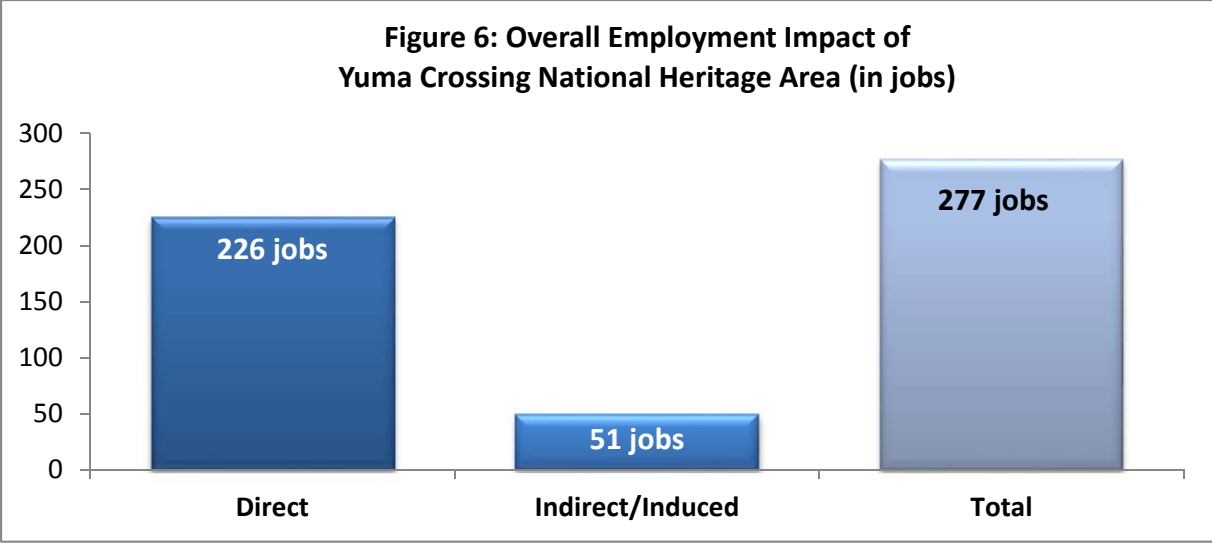


Table 24: Yuma Crossing National Heritage Area – Overall Employment Impact

	Direct Effect	Indirect Effect	Induced Effect	Total Effect*
Employment Impact	226 jobs	27 jobs	24 jobs	277 jobs
<i>Tourism</i>	193 jobs	18 jobs	18 jobs	229 jobs
<i>Operations</i>	22 jobs	6 jobs	3 jobs	32 jobs
<i>Capital/ Grantmaking</i>	10 jobs	3 jobs	2 jobs	16 jobs

**Totals may not add due to rounding*

The “Top Employment Sectors” table below illustrates the sectors with the largest number of jobs (includes direct, indirect, and induced) supported by the YCNHA. Industries such as food services, hotels, and retail stores represent the largest number of jobs while the ripple effect illustrates that jobs in construction and architectural services are also supported by the spending attributable to YCNHA. (See Table 25)

Table 25: Yuma Crossing National Heritage Area – Top Employment Impact Sectors

Industry	Jobs
Food services and drinking places	91 jobs
Other amusement and recreation industries	50 jobs
Hotels and motels	38 jobs
Grantmaking, giving, and social advocacy organizations	22 jobs
Retail Stores General merchandise	13 jobs
Construction of other new non-residential structures	10 jobs
Retail Stores Food and beverage	8 jobs
Retail Stores - Gasoline stations	3 jobs
Services to buildings and dwellings	3 jobs
Architectural, engineering, and related services	2 jobs

G. GOVERNMENT REVENUE IMPACT

NHAs also support state and local governments with the generation of government revenue or tax revenue. As a result of YCNHA’s work to attract visitors and its operations, the tourism industry within the heritage area generates **\$1.3 million in** tax revenue annually. YCNHA provides a strong return on investment for National Park Service funding. In the past three years, YCHNA has expended/invested an average of \$404,000 in NPS funds in the area. Based on these expenditures and the attraction of tourists to the region, **\$3.22** in state and local tax revenue has been generated for every federal dollar invested.

Description	Employee Compensation	Tax on Production and Imports	Households	Corporations
Dividends				
Social Ins Tax- Employee Contribution	\$5,217			
Social Ins Tax- Employer Contribution	\$10,257			
Tax on Production and Imports: Sales Tax			\$675,203	
Tax on Production and Imports: Property Tax			\$474,797	
Tax on Production and Imports: Motor Vehicle License			\$6,250	
Tax on Production and Imports: Severance Tax			\$3,038	
Tax on Production and Imports: Other Taxes			\$33,432	
Tax on Production and Imports: S/L NonTaxes			\$8,471	
Corporate Profits Tax				
Personal Tax: Income Tax				\$72,245
Personal Tax: NonTaxes (Fines- Fees)				\$23,842
Personal Tax: Motor Vehicle License				\$3,831
Personal Tax: Property Taxes				\$2,733
Personal Tax: Other Tax (Fish/Hunt)				\$2,789
Total State and Local Tax	\$15,473		\$1,201,191	\$105,440
			Overall Total	\$1,340,151

Conclusion

The case studies presented demonstrate that NHAs are valuable economic contributors to the local regions and states where they operate. The partnerships they create and facilitate and the efforts put forth by each organization truly make a difference in their communities. Each serves as a vital part of the local and regional economy contributing millions of dollars annually and sustaining jobs.

- **Essex National Heritage Area** (MA) generates **\$153.8 million** in economic impact, supports **1,832 jobs**, and generates **\$14.3 million** in tax revenue.
- **Oil Region National Heritage Area** (PA) generates **\$21.2 million** in economic impact, supports **314 jobs**, and generates **\$1.5 million** in tax revenue.
- **Yuma Crossing National Heritage Area** (AZ) **\$22.7million** in economic impact, supports **277 jobs**, and generates **\$1.3 million** in tax revenue.

Appendix A: Glossary of Terms

Study Year	Three Year Average of 2010, 2011, and 2012
Total Economic Impact	The total economic impact of an NHA includes the direct, indirect, and induced impact generated in the economy as a result of the institution's presence.
Direct Economic Impact	Direct impact includes items such as operational spending, spending by visitors to the NHA, and grantmaking/capital expenditures. For example, the economic impact of visitors to NHAs is the primary source of economic benefit to the regions in which NHA operates. The direct consequence of travel expenditures become business receipts which in turn are used to pay wages and salaries and taxes.
Indirect Economic Impact	Indirect impact, also known as the multiplier effect, includes the re-spending of dollars within the local economy by vendors and suppliers. For example, indirect impacts are related to local businesses spending part of their receipts on goods and services they require to serve customers, including investment in new equipment and structures. In turn, their suppliers must purchase certain items from others. This is the multiplier effect of economic activity attributed to visitor spending to NHAs. Each level of impact creates salaries, employment, and tax revenues.
Induced Economic Impact	Induced impact measure the effects of the changes in household income. For example, this impact includes the household spending of the wage and salary income generated by the visitors to the NHA. Induced effects refer to money recirculated through the economy as a result of household spending patterns generating further economic activity.
Direct Employment	Total number of jobs created in the economy as a result of operations, tourist spending and grantmaking activities.
Indirect Employment	Indirect employment is the additional jobs created as a result of the institution's economic impact. Local companies that provide goods and services to an institution increase their number of employees as purchasing increases, thus creating an employment multiplier.
Multiplier Effect	The multiplier effect is the additional economic impact created as a result of the NHA's direct economic impact. Local companies that provide goods and services to an institution increase their purchasing by creating a multiplier. Multipliers in this study are derived through IMPLAN.
Government Revenue Impact	Government revenue that is collected by governmental units in addition to those paid directly by an institution, including taxes paid directly by employees of the institution, visitors to the institution and vendors who sell products to the institution.

Appendix B: Research Methodology

The study and analysis within utilizes recommendations from previous research to establish a procedure and baseline analysis of how NHAs impact the economy. The research protocol established utilizes existing NHA data collection processes to streamline efforts required by an NHA to complete the analysis.

The estimates made in this analysis are intentionally conservative as to not inflate the results. In fact, the estimates are conservative in that many types of visitor spending are not counted due to limitations of data collection and trip purpose. In most cases, visitor counts and trip purpose are not quantified with existing data sources. All sites utilized visitor counts prepared for the National Park Service, with a majority relying on partners and visitor counts from the primary attractions and visitor centers in their area.

A three-year average of visitor counts to the NHA regions was utilized to provide a data-driven estimate of the annual number of visitors and accounts for spikes in visitor activity that can occur due to special circumstances. The final visitor impact estimates are substantial and demonstrate the importance of heritage tourism to a local economy. We must be aware that within economic analysis, the results are dependent on the data sources utilized to conduct the analysis.²⁰ Day visitors were more likely to make the trip specifically to visit the heritage area attraction than visitors on overnight trips. The report identifies these limitations and the effect they have on the analysis. Collecting visitor data is a challenge to the existing resources of NHAs. Approximations of visit data for different facilities may not be completely consistent and vary considerably. As with all economic impact assessments, data utilized and estimates should be viewed as estimates based on the best information presently available.²¹

Tripp Umbach based visitor and general tourist spending patterns on National Park Visitor Spending estimates established in 2010.²² The use of a secondary source provides the analysis with a research-based assumption that can be readily duplicated in future years for additional impact studies. No inflation adjustments were made to the 2010 NPS spending amounts.

The bulk of economic activity supported by NHAs is accounted by the spending of visitors to NHAs. The type of visitor can be segmented into specific segments consistent with those

²⁰ In most cases, we lack a clear definition of which visitors to the destination region should be considered “heritage area visitors” and there are questions about the accuracy and consistency of visit statistics reported by some facilities. In a previous study, Stynes et al. research identified that on average, 57% of visitors to an NHA reported that one or more of the attractions in the heritage area was the primary purpose of their trip.

²¹ In previous NHA economic impact studies completed in 2004 and 2005, Stynes et al. determined that NHAs could utilize a ratio that approximates that 25,000 visitors spend \$2.5 million in the local region. The direct impacts of this spending are \$780,000 in wages and salaries, \$1.2 million in value added, and 51 jobs. Tripp Umbach utilized these projections as a gauge to determine the relative similarities between the TU IMPLAN models and the MGM spending model.

²² *Ibid.*

identified in previous impact studies conducted for the NPS. The segments identified as NHA visitors were local day-trip, non-local day-trip, and overnight hotel/motel guests. This analysis utilizes the spending patterns of these three distinct NHA visitor segments. Visitor spending estimates rely on reported visitors to each NHA, followed by breaking down visits into segments with distinct spending patterns and applying spending averages based on existing spending trends.

Economic Analysis Process

Tripp Umbach's methodology for calculating NHA economic benefits may be utilized for other NHA sites. The intention to develop a protocol requiring minimal resources from NHAs was balanced with the development of a protocol that could be replicated with a basic understanding of economic impact input-output analysis, the data collection process, IMPLAN software, and the purchase of IMPLAN data specific to the geographic footprint of the NHA site. The data collection process primarily consists of data points aggregated by NHAs for their Annual Performance Measure Survey, completed annually for the National Park Service. Additional information regarding the use and purchase of IMPLAN3 software is available through MIG, Inc.²³

It is helpful to think of an input-output model such as IMPLAN as an economic exercise, based on the collection of known data source variables then inputted into the model to simulate how a change in a sector of the economy affects the overall conditions of the economy. An input-output model can simulate the ripple effects of a given sector on the entire economy. The data collection process provides the direct spending effects of a particular sector attributable to the NHA. The model simulates the indirect effects and the induced effects. Summing the direct, indirect, and induced effects provides a reasonable estimate for the impact that a certain sector has on the entire economy.

For example, the economic impact of visitors to NHAs is the primary source of economic benefit to the regions which NHA operates. The *direct* consequence of travel expenditures become business receipts which in turn are used to pay wages and salaries and taxes.²⁴

Indirect or secondary benefits are attributed to local businesses spending part of their receipts on goods and services they require to serve customers, including investment in new equipment and structures. In turn, their suppliers must purchase certain items from others. This is the

²³ The analysis requires the use of IMPLAN3 software and geographic data representative of the NHAs local and state region. Additional information on IMPLAN can be found at the MIG, Inc. website: <http://implan.com/V4/Index.php>.

²⁴ The analysis does not quantify the direct costs such as visitors utilizing a recreation area that requires expenditures to repair or maintain.

ripple effect of economic activity attributed to visitor spending to NHAs. Each level of impact creates salaries, employment, and tax revenues.

The other type of secondary benefit is *induced*. This benefit accounts for the consumption spending of the wage and salary income directly generated by the visitors to the NHA. Induced effects refer to money recirculated through the spending patterns of households causing further local economic activity.

For each case study site, the “Top Employment Sectors” table illustrates the sectors with the largest number of jobs (includes direct, indirect, and induced jobs) supported by the NHA. Industries such as food services, hotels, and retail stores represent the largest number of jobs attributable to NHAs, while the ripple effect illustrates that jobs in real estate, healthcare, and other indirect industry sectors also support jobs indirectly attributable to the NHA.

The step-by-step process illustrates the economic impact modeling process.

Step One – Data Collection

The economic impact analysis is quantified from available data sources. NHA sites are asked to complete the data collection form developed by Tripp Umbach. All data points are described within the data collection form. These include visitation numbers, operating expenditures, the number of NHA employees, funding from NHAs specific to capital and construction activities, funding from NHAs for educational and support grants, plus any additional public or private matching dollars associated with the NHA grant. The annual amounts for the three most recent years are inputted and an average of those three years is calculated within the data collection form.

Step Two – Visitation inputs

Visitor expenditures are best viewed as the initial monetary activity that stimulates the production process and initiates realistic measurement of economic benefit or impact. Estimating visitors is perhaps the greatest challenge that NHAs face when developing annual counts. They depend primarily on the working relationships and partnerships that they share among partners, sites, and attractions within their areas to calculate visitor estimates.

Visitor economic impact typically requires three basic inputs: (1) the number and types of visitors, (2) visitor spending patterns, and (3) local economic ratios and multipliers. Multipliers for this analysis were obtained from IMPLAN databases, geographically focused for regions around heritage areas and the state economies.

Annual visitation averages are applied to three specific visitor segments approximated from national NPS visitor information data.²⁵ The segments identified within qualitative interviews

²⁵ Stynes, D. J. 2011. Economic benefits to local communities from national park visitation and payroll, 2010. Natural Resource Report NPS/NRSS/EQD/NRR—2011/481. National Park Service, Fort Collins, Colorado.

with NHA site directors and stakeholders as the most likely visitors to NHAs are local day, non-local day, and overnight visitors. The percentage of the overall visitors and their respective segments are represented in Table 27: Visitor Spending by Segment.

Visitor Segment	% of Total Visitation*	Average Daily Spending
Local Day²⁶	29%	\$40.36
Non-Local Day²⁷	40%	\$69.60
Overnight²⁸	31%	\$262.41

Each of the visitor segments spends varying amounts of money while visiting the NHA region. The spending estimates of these groups are then applied to spending averages from the 2010 National Park Service (NPS) economic impact study.²⁹ The ratio of visitors and spending averages are then calculated to provide total spending estimates for each segment and for each specific type of spending associated with visitation and tourism.³⁰

Visitor Type	Motel, hotel, B&B	Camping fees	Restaurants & bars	Amuse-ments	Groceries	Gas & oil	Local transportation	Retail Purchases
Local day-trip spending allocation	0.0%	0.0%	31.2%	11.3%	15.1%	21.7%	1.4%	19.3%
Non-local day-trip spending allocation	0.0%	0.0%	27.8%	13.3%	9.9%	27.3%	2.8%	18.9%
Overnight spending allocation	39.9%	0.1%	23.8%	7.9%	5.8%	8.6%	3.5%	10.4%

²⁶ Local day users are defined as those visitors living within the geographic region of the NHA and visiting a heritage attraction, site, or facility for the day. The definition is consistent with those used in the National Park Service Natural Resource Report.

²⁷ Non-local day visitors are defined as those visitors living outside the geographic region of the NHA and visiting a heritage attraction, site, or facility for the day.

²⁸ Overnight visitors are defined as those visitors living outside the geographic region of the NHA and visiting a heritage attraction, site, or facility for multiple days, including an overnight stay.

²⁹ Stynes, D. J. 2011. Economic benefits to local communities from national park visitation and payroll, 2010. Natural Resource Report NPS/NRSS/EQD/NRR—2011/481. National Park Service, Fort Collins, Colorado.

³⁰ The analysis acknowledges the possibility of average spending variance through the utilization of average spending derived from consumer choices, estimates, and average visitor counts.

Each spending category has an associated IMPLAN code for which it is related to within the IMPLAN software. The spending category and IMPLAN codes are detailed in Table 29: Spending Estimates by Sector Type.

IMPLAN Sector	Sector Name	Spending Type
324	Retail Stores Food and beverage	Groceries
326	Retail Stores – Gasoline stations	Gas & oil
329	Retail Stores General merchandise	Retail Purchases
336	Transit and ground passenger transportation	Local transportation
410	Other amusement and recreation industries	Amusements
411	Hotels and motels, including casinos	Motel, hotel, B&B
412	Other lodging accommodations	Camping fees
413	Food service and drinking place	Restaurants & bars

Once the spending amounts are calculated for each visitor segment and spending type, the next step is entering the spending amounts into the IMPLAN software. Each visitor segment, local day, non-local, and overnight visitors are created as a unique event within the IMPLAN model.

Economic impact measures attempt to estimate the likely losses in economic activity to the region in the absence of the heritage site. Should the heritage area and its partners not be available, it is assumed that local residents would spend the money on other local activities, while visitors from outside the region would not have made a trip to the region. Based on visitors sampled at heritage areas, approximately two-thirds of the associated economic impacts would be lost to the regions in the absence of the heritage attractions. The largest impacts result from overnight visitors staying in local lodging establishments. Local resident spending is included in the economic benefits measures, as this captures all economic activity associated with heritage area visits, including local and non-local visitors. Spending by local residents on visits to heritage areas does not represent new money to the region.³¹

Step Three – Operational Impacts

The operational impacts of NHAs are estimated from the total number of direct jobs employed by the NHA. Total jobs include full-time and part-time employees. Operational expenditures may also be calculated by entering the actual expenditures of the organization over the annual time period. Again, a three-year average is utilized to eliminate drastic variations (cuts or

³¹ The economic effect of NHAs is an overall contribution to their regional economies. Though local visitor spending is not considered within a marginal analysis due to the fact local residents have choices on where they spend their money within the region, in a contribution sense, residents of the local area do make choices to spend money in the local NHA region due to the NHAs mission fulfillment of preservation and education. In a contribution sense, this economic effect does benefit the regional economy.

increases) to annual spending amounts. The employment or spending is entered into the IMPLAN model within Sector 424, Grantmaking, Giving, and Social Advocacy Organizations.

The economic analysis completed for the operational impact analysis uses actual expenditures and NHA employment to drive estimates of employment, income, and tax revenue. Operational impacts refer to the day-to-day management, coordination, and activities executed by the NHA and its staff. It refers to the impact of “doing business” as a non-profit organization in the region. Business refers to a number of activities for each NHA, but for purposes of this analysis, operational impacts are derived from the number of paid employees working for the NHA.

Step Four – Grant Funding and Support

NHA-funded grants to regional partners and associated revenue “matches” from regional organizations are tracked by each NHA site annually. Grant funding is calculated in the economic impact model as sector 5001 employee compensation. The assumption being that grant support ultimately supports the salaries of the organization(s) receiving grant funding. The economic value of NHA-developed federal and state funding within the region primarily circulates through the economy in the form of knowledge transfer and increased salary amounts for organizations receiving the grant funding.

Step Five – Capital Specific Funding

Capital-specific funding is calculated separately. Funding for a specific construction or capital improvement project is assigned as a unique event within the IMPLAN software, categorized under IMPLAN code 36, construction of non-residential structures. Additional grant funding focused on capital and construction development also includes the educational mission of NHAs and the role that the staff has in serving as catalysts for economic development opportunities in the regions which they operate. For example, if an NHA facilitates the award of a \$25,000 federally sponsored grant to develop a section of biking trail, this economic benefit to the region is captured within the analysis by capturing the estimated increase in salaries and wages to facilitate award of the grant within the NHA and within the receiving organization. Further, if a portion of the award was attributable to specific capital improvements or construction, this was attributed accordingly within the input-output model to account for related construction expenditures and jobs. Grants awarded were included in the model based on year effective when the year that the grant was awarded was not the same.

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