

Estimating Economic Impacts of National Park Visitors

MGM2 Money Generation Model

New Version



MICHIGAN STATE
UNIVERSITY

MGM2: A Four Step Process

Step 1. Choose a set of visitor segments and spending profiles

- Spending is itemized in detail by park visitor segment and 12 spending categories
- Import default values or custom spending data
- Price adjust spending to current year
- Edit default spending profiles or enter your own data

SEGMENT	Party-night	Parks- Medium						
CATEGORY	L-Day User	NL-Day User	Motel-In	Camp-In	Backcountry Campers	Motel-Out	Camp-Out	VFR
Motel, hotel cabin or B&B	0.00	0.00	90.84	0.00	4.50	80.26	0.00	0.00
Camping fees	0.00	0.00	0.00	15.08	2.00	0.00	19.53	0.00
Restaurants & bars	11.28	14.98	33.39	9.27	5.80	36.11	11.35	11.00
Gasoline, take-out food/drink	8.24	5.69	8.52	12.04	4.16	6.01	8.21	11.24
Gas & oil	6.37	7.97	10.19	13.74	5.00	12.75	10.65	8.54
Other vehicle expenses	0.60	0.82	1.80	1.07	0.00	1.14	1.17	0.20
Local transportation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
Admissions & fees	3.00	6.00	9.50	4.99	3.00	9.12	12.08	3.29
Clothing	1.25	2.00	4.50	3.90	0.96	5.49	6.73	3.05
Spending goods	1.12	1.05	1.08	1.13	2.54	1.54	0.61	2.00
Gambling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tobacco and other expenses	6.15	6.57	9.92	5.47	6.04	10.21	12.06	10.00
Total	38.11	45.08	165.94	65.69	34.00	162.73	82.49	50.00

Step 4. View and print results

Direct economic effects of visitor spending are reported by economic sector

- Sales
- Income
- Jobs
- Value Added

Total effects

- Direct effects
- Indirect effects
- Induced effects

Sample output tables

"MGM2 has a more specific breakout of expenditures by different segments of park visitors which makes it more accurate." Ray Murray, NPS, Pacific West

Step 2. Enter the number and types of visitors by segment

Use the Default segments

- Local visitors
- Non-local day visitors
- Overnight visitors by lodging type, staying inside or outside the park

Define your own segments

- activity groups
- by season

SEGMENT	SHARE	Party-night
L-Day User	15.0%	15,000
NL-Day User	33.0%	33,000
Motel-In	1.0%	1,000
Camp-In	5.0%	5,000
Backcountry Can	1.0%	1,000
Motel-Out	35.0%	35,000
Camp-Out	5.0%	5,000
VFR	5.0%	5,000
	0.0%	0
	0.0%	0
	0.0%	0
	0.0%	0
CHECK SUM	100.0%	100,000

Step 3. Choose multipliers for the local area

- Built in "generic" multipliers to represent four types of regions
- Custom multipliers for specific areas can be imported from IMPLAN models
- Sector specific multipliers capture impacts of spending in different sectors, e.g. hotels, restaurants, amusements, retail stores

Sector	Direct effects				Total effects multipliers			
	Jobs \$/M sales	Personal Income \$/sales	Property Inc./sales	Value Added \$/sales	Sales Type II \$/M sales	Jobs Type II \$/sales	Income Type II \$/sales	Sales Type I
Hotels And Lodging Places	28.88	0.29	0.10	0.44	1.37	35.24	0.42	1.25
Food & Drinking	35.25	0.31	0.07	0.44	1.30	40.41	0.42	1.19
Amusement And Recreation	33.24	0.24	0.17	0.56	1.32	38.82	0.42	1.19
Restaurants And Taverns	14.62	0.28	0.12	0.44	1.24	19.23	0.37	1.16
Local Transportation	37.58	0.51	0.08	0.62	1.28	42.94	0.63	1.19

Sector/Spending category	Direct Sales \$Millions	Jobs Thousands	Personal Income \$Millions	Value Added \$Millions
Motel, hotel cabin or B&B	2,904	81	843	1,281
Camping fees	175	5	51	77
Restaurants & bars	2,124	72	669	932
Admissions & fees	677	22	233	381
Gambling	-	-	-	-
Other vehicle expenses	90	1	25	39
Local transportation	3	0	2	2
Retail Trade	994	38	507	792
Wholesale Trade	157	2	63	107
Local Production of goods	92	0	4	8
Total	7,216	221	2,396	3,620

Economic measure	DIRECT EFFECTS	Multiplier	TOTAL EFFECTS
Output/Sales (\$ Millions)	\$ 7,216	1.33	\$ 9,586
Personal Income (\$ Million)	\$ 2,400	1.33	\$ 3,193
Value Added (\$ Millions)	\$ 3,629	1.40	\$ 5,094
Jobs Thousands	221	1.18	260
Total Visitor Spending (\$ Millions)	\$ 8,946		
Capture rate		81%	
Effective spending multiplier		1.07	

A simpler Short Form version is also available. The Short Form provides quick, aggregate results for situations where local data or time may be limited.

An updated and enhanced version of the NPS Money Generation Model is now available. The Money Generation Model has been widely used to estimate the economic impacts of National Parks on local regions. The new version –MGM2) – makes the Money Generation Model **easier to use, more credible, and more flexible.**

Easy to use

- Spreadsheet interface (Excel)
- Default spending data and multipliers are built in
- Easy editing or importing of spending and multiplier datasets
- Choose between a Short Form version or Full version to suit a particular application

Credible results

- Results are based on the number and types of visitors to capture spending patterns of distinct visitor segments
- Spending data from park visitor surveys
- Multipliers from IMPLAN models

Increased flexibility, wider uses

- Estimate impacts of current visitors as with the original MGM
- Evaluate impacts of management and policy alternatives
- Targeted analysis of particular visitor segments
- Use MGM2 to link with other data sources
 - Park visitor surveys & local tourism data
 - Local economic data & IMPLAN models
 - Park use and overnight stay data

"The interface is extremely easy to use and very understandable ...planners can generate an analysis in an afternoon...data is now more easily obtainable... multipliers are built into the model -- bottomline -- no loss in usability and improved credibility" Chris Marvel, NPS, Denver

Uses of economic impact information

- Foster partnerships within the community
- Build support for the park and park policies
- Evaluate alternative management, marketing and policy alternatives
- Assess costs and benefits across distinct user and stakeholder groups

How can I use MGM2?

Depending on time, resources, and frequency of model use, parks may...

Do it yourself - download the MGM2 spreadsheets and manuals from our website and use them as an integral part of planning and evaluation. Technical support is available on-line and further training can be arranged.

Get help: MSU will assist first-time users with an initial impact analysis and will also contract for more extensive applications.

MGM2 requires Microsoft Excel 97 or 2000.

For more information:

Website : <http://www.prr.msu.edu/mgm2/>

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