

INTRODUCTION

INTRODUCTION

This Excel Guide is intended to support risk-owners with determining an Economic Impact Score for risk scenarios under the 2016 National Risk Assessment (NRA).

All user
inputs
should

WHAT IS ECONOMIC IMPACT ?

Economic Impact is the monetary sum of all metrics that are currently available

**WHEN
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ceases**

**Cabinet Office
Civil Contingencies Secretariat
September 2015**

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.x.gsi.gov.uk, or(I&S)@cabinet-office.x.gsi.gov.uk

ECONOMIC IMPACT

KEY:RED BOX = Requires user data. You must input something.
BLUE BOX = Optional additions or user modifications. Existing data can be replaced if superior risk-specific

WHAT TO DO

For each risk scenario work through the following headings one by one, assessing the expected monetarv

LOST TOURISM

Geographic area of

Severity of effect:

Please click to select each RED BOX in turn and select an appropriate entry from the drop down list. The BLACK BOX will update automatically. Definitions and figures can be found in tab "1.

Therefore, estimated co

£0

(Optional Notes)

LOST WORKING

Number of working

Please enter an assessment of the number of lost working hours from non-casualties and non-

Therefore, estimated co

£0

(Optional Notes)

LOST ASSETS

Value of expected lost assets:

Please enter your expected value of lost assets in the RED BOX. The BLACK BOX will update automatically

Therefore, estimated co

£0

(Optional Notes)

FATALITIES & CASUALTIES

FATALITIES

Number of expected fatalities:

Therefore, estimated co

£0

CASUALTIES

(Optional Notes)

Number of expected casualties: Therefore, estimated cost: £0

Casualty severity ratio: 2...slight injuries for every one severe injury.

Please enter your total number of expected fatalities and casualties in the respective RED BOXES. The BLACK BOXES will update automatically. Underlying figures can be found in tab "4. Fats and Cas". The cost of each casualty is assessed based on a severity ratio of "2", whereby there is one severe injury for every two slight injuries.

E.g. three people have been hurt in total.

ENVIRONMENTAL DECONTAMINATION

Contaminant type: Therefore, estimated cost: £0

Contaminant severity:

Environment:

Please click to select each RED BOX in turn and select an appropriate entry from the drop down list. The BLACK BOX will update automatically. Definitions and figures can be found in tab "5. Env Decon". Please note that this figure is extremely context-specific and as such

(Optional Notes)

SHELTER

GROUP ONE

Number of persons requiring shelter: Number of days these people require shelter: Therefore, estimated cost from both groups is: £0

GROUP TWO (if necessary)

Number of persons requiring shelter: Number of days these people require shelter:

Shelter is defined as temporary overnight accomodation. Individuals require shelter when their existing overnight accomodation becomes inaccessible due to any means. Visitors forced to evacuate an area do not require shelter if they can be reasonably expected to still have homes they can reach within the same day (e.g. a museum being evacuated).

Please enter the number of expected

OTHER COSTS

If there are any other costs that risk owners urgently need to account for, they should be entered in the BLUE BOX below. Further costs are not required, but departments may choose to include additional information based on bespoke departmental processes.

(Optional Notes)

If necessary, enter any additional costs here:

TOTAL COST

Estimated total cost:

£0

Therefore, the overall Economic Impact Score for your risk is:

0

The final score corresponds to the following scale:

- "1" - Millions of £
- "2" - Tens of millions of £
- "3" - Hundreds of millions of £
- "4" - Billions of £
- "5" - Tens of billions of £

Total cost is calculated by adding together the individual costs from each type of impact. This provides a sum total of estimated monetary costs of a marginal (one-off) incident, based on available figures and

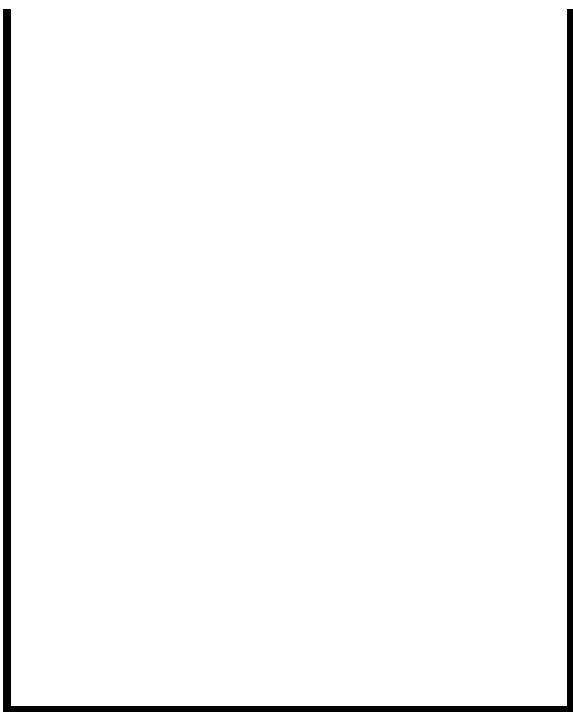
GROSS DOMESTIC PRODUCT (GDP)

In order to illustrate
large economic costs it
can be helpful to
express them in terms
of GDP. This gives an
estimated

Total estimated cost expressed as a percentage (%) of UK GDP:

0.0000%

(Optional Notes)



LOST TOURISM

Percentage fall in TDGVA (%)				
Severity	Year One	Year Two	Year Three	
Negligible	0.00%	0.00%	0.00%	Geographic area
Minor	2.50%	1.25%	0.31%	Total UK
				Weighted regional average
Moderate	7.50%	3.75%	0.94%	Weighted local average
Severe	15.00%	7.50%	1.88%	

Tourism loss is assessed using two factors: Severity and Geographic Area, and is measured based on how each effects Tourism Direct Gross Value Added.¹

When assessing severity, this effect is inherently unpredictable. Please note the following examples of the estimated effect on certain tourism metrics at a national level in year one of these given

Note that these examples are heavily focussed on high-profile

TAB. Note that "Negligible" severity is intended to be selected on MAIN TAB. Once values

0	0
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Cost of lost tourism (£)			
Severity	Local	Regional	National
Minor	0	0	0
Moderate	0	0	0
Severe	0	0	0

100

£0

Further
information on
the local and
national rail

Table One - NUTS 1 Regions

NUTS-1 Region	DOVA (€) by year		
	DOVA (€) 2017	DOVA (€) 2018	DOVA (€) 2019
EU	48,700,000,000	52,371,900,000	52,371,900,000
East Midlands	2,300,000,000	2,615,100,000	2,615,100,000
East of England	3,400,000,000	3,865,900,000	3,865,900,000
England	13,100,000,000	14,894,700,000	14,894,700,000
North East	1,250,000,000	1,250,000,000	1,250,000,000
North West	5,100,000,000	5,798,700,000	5,798,700,000
North Wales	300,000,000	341,100,000	341,100,000
Scotland	5,000,000,000	5,685,000,000	5,685,000,000
South East	8,600,000,000	7,504,200,000	7,504,200,000
South West	4,400,000,000	5,002,800,000	5,002,800,000
Wales	2,300,000,000	2,615,100,000	2,615,100,000
West Midlands	2,500,000,000	2,842,500,000	2,842,500,000
Yorkshire and the Humber	2,600,000,000	2,950,200,000	2,950,200,000

Table Two - NUTS 2 Regions

HUTS 2 Regions	TDVA (R) by year			
	TDVA (R) 2011	TDVA (R) 2012	TDVA (R) 2013	TDVA (R) 2014*
SE	48,480,000	55,345,100	55,345,100	55,345,100
Western	700,000,000	795,900,000	795,900,000	795,900,000
Perthshire/Highland	1,210,000,000	1,375,700,000	1,375,700,000	1,375,700,000
Zealand	590,000,000	670,000,000	670,000,000	670,000,000
Central and South	1,000,000,000	1,137,800,000	1,137,800,000	1,137,800,000
Campania	650,000,000	739,050,000	739,050,000	739,050,000
Enterprise and North	1,260,000,000	1,432,620,000	1,432,620,000	1,432,620,000
Swan	1,040,000,000	1,182,480,000	1,182,480,000	1,182,480,000
Israel and Portugal	1,030,000,000	1,171,100,000	1,171,100,000	1,171,100,000
Central	1,650,000,000	1,879,050,000	1,879,050,000	1,879,050,000
East Valley and	380,000,000	432,280,000	432,280,000	432,280,000
East Wales	910,000,000	1,034,670,000	1,034,670,000	1,034,670,000
Israel	1,020,000,000	1,159,750,000	1,159,750,000	1,159,750,000
White and	1,370,000,000	1,567,860,000	1,567,860,000	1,567,860,000
South	2,370,000,000	2,854,960,000	2,854,960,000	2,854,960,000
Central	1,210,000,000	1,375,700,000	1,375,700,000	1,375,700,000
Enterprise and North	690,000,000	784,530,000	784,530,000	784,530,000
Swan	1,300,000,000	1,478,100,000	1,478,100,000	1,478,100,000
Central	710,000,000	807,270,000	807,270,000	807,270,000
Enterprise and North	860,000,000	973,160,000	973,160,000	973,160,000
Central	410,000,000	466,170,000	466,170,000	466,170,000
Enterprise and North	770,000,000	874,600,000	874,600,000	874,600,000
Central	890,000,000	1,011,930,000	1,011,930,000	1,011,930,000
Enterprise and North	330,000,000	375,210,000	375,210,000	375,210,000
Enterprise and North	830,000,000	943,710,000	943,710,000	943,710,000
Enterprise and North	6,500,000,000	7,360,500,000	7,360,500,000	7,360,500,000
Enterprise and North	5,000,000,000	5,685,000,000	5,685,000,000	5,685,000,000
Enterprise and North	570,000,000	648,000,000	648,000,000	648,000,000
Enterprise and North	460,000,000	523,020,000	523,020,000	523,020,000
Enterprise and North	2,840,000,000	3,239,000,000	3,239,000,000	3,239,000,000
Enterprise and North	250,000,000	284,250,000	284,250,000	284,250,000
Enterprise and North	1,250,000,000	1,421,250,000	1,421,250,000	1,421,250,000
Enterprise and North	1,340,000,000	1,528,000,000	1,528,000,000	1,528,000,000
Enterprise and North	870,000,000	985,100,000	985,100,000	985,100,000

Footnotes

(5) The most up to date comprehensive list of TDGVA figures are sourced from 2011. The 2013 figure is arrived at by

Sources

Office for
National
Statistics
(ONS)

LOST WORKING HOURS

Median hourly pay	11.61
Working hours per	7.5

This section represents an estimated average cost of lost working productivity over time for all those people who are not injured or killed by the scenario, but who for whatever reason cannot access or use their place of work. This could be due to transport

Footnotes

(1) UK median hourly pay, 2014. This figure includes both genders as well as full and part-time workers, and is

Sources

Office for National Statistics (ONS) publication - 'ONS Annual Survey of

LOST ASSETS

Note
that for
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Sources

As this
metric is

FATALITIES & CASUALTIES

Element of Cost (£)					
Type of Harm	Human ²	Productivity ³	Medical (stays) ⁴	Medical (treatment) ⁵	Total (£)
Fatality	1,203,798	631,172	0	1,084	1,836,054
Serious injury	167,273	24,317	2,716	14,732	209,038
Slight injury	12,245	2,570	611	1,090	16,516
Recommended value for average injury ¹	-	-	-	-	80,690

The average cost per casualty is based on a standard ratio of one severe injury for every two slight injuries, giving an average cost per casualty of £80,690.

This ratio can be modified

Severity ratio 2 severe injury, therefore the average cost is:

Footnotes

(1) Average injury costs are calculated in order to give a fixed cost per casualty. This calculation is explained on the MAIN TAB, with further examples included above.

(2) "Human" costs are a

Sources

DfT publication - TAG Unit

ENVIRONMENTAL DECONTAMINATION

Contaminant type	Severity	Open environment type (£)	Closed environment type (£)
		Open ⁷	Closed ⁸
Chemical ¹	Minor ⁴	1,000,000	200,000
	Moderate ⁵	2,000,000	500,000
	Severe ⁶	5,000,000	800,000
Biological ²	Minor	20,000,000	200,000
	Moderate	50,000,000	500,000
	Severe	80,000,000	800,000
Radiological ³	Minor	200,000,000	2,000,000
	Moderate	500,000,000	5,000,000
	Severe	800,000,000	8,000,000

Decontamination costs are assessed differently based on the type of contaminant, the severity

Three zeros will display if no values are selected on MAIN TAB. Once values are selected, they will display here:

0	0	0
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Contaminant type	Severity	Open environment type (£)	Closed environment type (£)
		Open	Closed
Chemical	Minor	0	0
	Moderate	0	0
	Severe	0	0
Biological	Minor	0	0
	Moderate	0	0
	Severe	0	0
Radiological	Minor	0	0
	Moderate	0	0
	Severe	0	0

Estimated cost is:

£0

Footnotes

(1)
"Chemical"
contaminants are any chemical, outside of its normal use, with the potential to cause harm to humans. This could include secondary consequences, such as unintended (6) "Severe" are assessed as larger incidents with multiple points of contamination or a large area of effect, all of which are

Sources

Government
Decontamination

SHELTER

Type of shelter	Cost per person each night (£)	Max stay (days)
Rest shelters ¹	35	2
Short-term private	80	30
Long-term private	60	Indefinite

Each person requiring shelter will be provided different types of accommodation based on how many days they require. Each person will spend up to the first 2 days in a rest shelter. Then

GROUP ONE	Total people	0
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Type of shelter	Days spent	Cost (£)
Rest shelters	0	0
Short-term private	0	0
Long-term private	0	0

Total cost (£)	0
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GROUP TWO	Total people	0
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Type of shelter	Days spent	Cost (£)
Rest shelters	0	0
Short-term private	0	0
Long-term private	0	0

Total cost (£)	0
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Footnotes

(1) Rest shelters are public buildings (e.g. school gymnasiums, libraries) used for emergency accommodation, with some limited conversions

Sources

Department for Communities