

Local Authority Permit Calculator

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Using the Permit Scheme Calculator

This calculator is for local authorities to assess the costs and benefits of using a permit fee scheme. Outputs from the calculator should be used as a guide for local authorities to assess the feasibility of a permit scheme. Outputs may also be used in a business case to support the local authority bid for a permit scheme.

Please read the guidance note and instructions below before using the calculator.

How to use the calculator

On the 'Inputs' sheet, please input the requested data. This will be used to calculate a range of benefits and costs affiliated with the permit scheme. These are then displayed on the 'Key outputs' sheet.

Inputs

Input the requested data into the blue highlighted cells

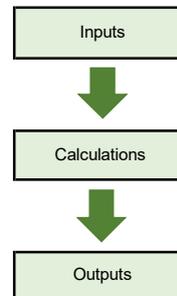
Calculations

Using the inputs provided, the model will calculate how the permit scheme will impact the local authority.

Outputs

Key outputs are displayed on this sheet.

Please use this sheet to assess the costs and benefits of the permit fee scheme in the local authority



Assumptions

The outputs of the calculator are subject to a number of assumptions. The assumptions are made to enable analysis in the absence of data and in interests of proportionality. This means that the outputs of the calculator should be treated as suggestive estimates, and should not be construed decisive statements about the performance of the scheme in your local authority.

Behavioural assumptions - reduction in the duration of works (measured in work days)

The default behavioural assumptions are sourced from the Evaluation of Street Works Permit Schemes Report 2018.

Cost assumptions - additional costs for works promoters

The cost assumptions are sourced from the Evaluation of Street Works Permit Schemes Report 2018. The calculator assumes that works promoters will face additional administration costs from using the permit scheme that are equal to 20% of local highway authority costs.

Costs

Set-up costs for local authorities

Local authorities will incur a one time set-up cost in the first year of the scheme.

Running costs for local authorities

Local authorities will incur annual running costs. These costs occur as local authorities provide permits for works undertaken by both statutory undertakers and local authority works promoters.

Annual running costs in relation to statutory undertaker's works are recovered through the permit fee revenue.

Permit fees

Statutory undertakers will pay a fee to apply for a works permit. Local authority works promoters will apply for a permit but do not pay a permit fee.

Benefits

Permit fees

Local authorities receive their income through permit fees from statutory undertakers. The fees received will cover the annual running costs of the permit scheme in relation to statutory undertaker's works.

A reduction in the duration of works leads to lower congestion costs to road users

The calculator will estimate the reduction in the duration of works per year for the local authority. The calculator then monetises the effects in terms of:

- Reduced journey times
- More reliable journeys
- Reduction in accidents
- Reduction in carbon emissions and fuel consumption

Net Present Value

The calculator will then calculate the total costs and benefits over the full appraisal period. The appraisal covers the period of 10 years from 2019 to 2028, with a 2019 discount base. Please refer to the guidance note for more information on appraisal.

The Net Present Value (NPV) shows the difference between the value of the Net Present Benefits and the Net Present Costs. This indicates the value for money that a permit fee scheme provides.

Inputs

Please follow the instructions below and enter the inputs into the blue highlighted cells.
When complete, click the 'Go to outputs' button at the bottom of the sheet.

Instructions

Enter the name of the local authority

Enter the current number of street works that take place, per year, in the local authority.
Works should be broken down by works type - major, standard, minor, immediate
Works should be broken down by works promoter - works undertaken by Statutory Undertakers (Utility Companies) or by local authorities

Enter the total number of days taken to complete works
This should be broken down by works type and works promoter

Enter the percentage of all works that are completed on 0-2 category roads
This should be broken down by works type and works promoter

Enter the proportion of major works completed by each time period.
Use the number of works column to check the proportions are consistent with the breakdown of major works.

Select the preferred permit fee structure

It is recommended to use the maximum permit fee structure, unless there is strong evidence to use the custom permit fee structure.
The maximum permit fee structure is sourced from the Statutory Guidance for Highway Authority Permit Schemes 2015.

If a custom permit fee structure is preferred, please enter the fee per work split by works type and road type.

Please provide a short statement of supporting evidence for the custom permit fee structure.

Enter the expected set-up cost for the scheme. This includes the cost for a consultant if required. The cash (nominal) price base year is 2019.

Select the expected behavioural change in the duration of works due to the permit scheme.

It is recommended to use the default behavioural change unless there is strong evidence to use the custom behavioural change inputs

If a custom behavioural change is expected, enter the percentage change in the duration of works expected due to the permit scheme.

Please provide a short statement of supporting evidence for the custom behavioural change of the duration of works

Inputs

Name of the local authority: Herefordshire Council

Total number of street works

Current number of street works per year

	Statutory Undertaker	Local Authority
Major	370	304
Standard	684	113
Minor	2,263	430
Immediate	1,432	1,047

Current number of work days per year

	Statutory Undertaker	Local Authority
Major	11,470	8,512
Standard	6,430	1,186
Minor	4,073	857
Immediate	2,724	2,228

0-2 category roads

Percentage of works completed on 0-2 category roads

	Statutory Undertaker	Local Authority
Major	25.00%	28.00%
Standard	22.00%	25.00%
Minor	20.00%	24.00%
Immediate	24.00%	20.00%

Major Works

Proportion of major works completed by the number of days:

		Number of works:
Major works - over 10 days or traffic regulation order required	92%	620
Major works - 4 to 10 days and no traffic regulation order required	3%	20
Major works - up to 3 days and no traffic regulation order required	5%	34
Total:	100%	674

Permit Fee Structure

Preferred permit fee structure: Maximum

Maximum Permit Fee Structure		
	Road Category 0-2 or traffic sensitive road	Road Category 3-4 or non traffic sensitive road
Major works - over 10 days or traffic regulation order required	£240	£150
Major works - 4 to 10 days and no traffic regulation order required	£130	£75
Major works - up to 3 days and no traffic regulation order required	£65	£45
Standard works	£130	£75
Minor works	£65	£45
Immediate works	£60	£40

Custom Permit Fee Structure

	Road Category 0-2 or Traffic-sensitive	Road Category 3-4 and non traffic sensitive
Major works - over 10 days or traffic regulation order required		
Major works - 4 to 10 days and no traffic regulation order required		
Major works - up to 3 days and no traffic regulation order required		
Standard works		
Minor works		
Immediate works		

Local Authority costs

Set-up costs (first year only):	£30,000
Price base year:	2019

Behavioural change

Behavioural change in the duration of works: Default

Default behavioural change		
	Statutory Undertaker	Local Authority
Major	-13.9%	-6.5%
Standard	-1.6%	-7.7%
Minor	8.1%	-8.9%
Immediate	3.0%	0.0%

Custom behavioural change

	Statutory Undertaker	Local Authority
Major		
Standard		
Minor		
Immediate		

Go to outputs >>

Output Summary

Prices are based to 2018

Local Authority: Herefordshire Council

Key Inputs and Assumptions

Works input

Current number of street works per year

	Statutory Undertaker	Local Authority
Major	370	304
Standard	684	113
Minor	2,263	430
Immediate	1,432	1,047

Current number of work days per year

	Statutory Undertaker	Local Authority
Major	11,479	8,512
Standard	6,430	1,186
Minor	4,073	857
Immediate	2,724	2,228

Permit scheme fee structure

Preferred permit fee structure	Maximum	
Permit Fee Structure		
	Road Category 0-2 or Traffic-sensitive	Road Category 3-4 and Non-traffic sensitive
Major works - over 10 days or traffic regulation order required	£240	£150
Major works - 4 to 10 days and no traffic regulation order required	£130	£75
Major works - up to 3 days and no traffic regulation order required	£65	£45
Standard works	£130	£75
Minor works	£65	£45
Immediate works	£60	£40

Behavioural change in the duration of works

Behavioural change in the duration of works:	Default	
	Statutory Undertaker	Local Authority
Major	-13.9%	-8.5%
Standard	-1.6%	-7.7%
Minor	8.1%	-8.9%
Immediate	3.0%	0.0%

The duration of works will increase for one or more of the categories in this table. Please refer to the guidance note for more information

Local authority costs

Set-up costs	£30,000
Year of price base	2019

Key Outputs

Number of works

Total number of works	6,643
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The number of works that take place in the local authority will not change. The permit fee scheme will only impact the time taken to complete these works. The total duration of all works is measured in work days and is shown below.

Impact on number of workdays (total duration of works)

Total current number of work days	37,480
Expected number of work days due to permit scheme	35,474
Expected change in work days	-2,006

The expected behavioural change will decrease the duration of current works. This is equivalent to a decrease of 2,006 work days.

Breakdown of the impact on the number work days

	Statutory undertaker (Utility company)	Local Authority	Total
Major	-1,594	-553	-2,148
Standard	-103	-91	-194
Minor	330	-76	254
Immediate	82	0	82
Total	-1,286	-721	-2,006

A breakdown of the change in the duration of works, measured in work days, is shown in this table. Please refer to the guidance note for further information.

Impact on the costs of congestion to road users

Benefits to road users from the decrease in congestion costs	£1,611,491
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Breakdown of the benefits to road users from the decrease in congestion costs:

Business	
Journey Time Savings & Reliability	£805,418
Non-business	
Journey Time Savings & Reliability	£711,097
Accident	£14,105
Fuel carbon	£76,871

The reduction in the duration of works decreases the costs of congestion by £1,611,491 per year and is therefore a benefit to road users.

Please refer to the guidance note for further information on congestion cost impacts

Costs to the local authority to set up and operate the permit scheme

Set-up cost	£29,541
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Operational costs (per year)	£476,695
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LA costs:	
Costs to review and issue permits to LA works promoters	£135,989
Costs to review, issue permits and receive permit fees from statutory undertakers	£313,418
LA works promoter costs:	
Costs to apply for a permit (administration costs)	£27,198

The local authority will recover annual operating costs related to statutory undertaker permitting through revenue from statutory undertaker's permit fees. Costs to run the permit scheme for local authority works are non-recoverable.

First year cost to the local authority	£506,146
Subsequent annual cost to the local authority (second year onwards)	£476,695

Costs to local authority works promoters

Administration costs (per year)	£27,198
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Local authority works promoters will apply for a permit but do not pay a permit fee. Costs to local authority works promoters are the additional administration of using the permit scheme.

Costs to statutory undertakers

Permit fee costs (per year)	£313,418
Administration costs (per year)	£52,684

Statutory undertakers will apply for a work permit and pay a permit fee.

Annual revenue to the local authority

Annual revenue from the permit scheme	£313,418
Annual revenue from local authority works promoters permit fees	£0
Annual revenue from statutory undertakers permit fees	£313,418

Local authority revenue from the permit scheme comes from permit fees paid by statutory undertakers. Local authority works promoters do not pay permit fees.

Appraisal Outputs

Net Present Value	£9,199,640
Net Present Costs	£7,369,376
Net Present Benefits	£16,569,016

The appraisal covers the period of 10 years from 2019 to 2028, with a 2019 discount base. Please refer to the guidance note for more information on appraisal.