

## **APPENDIX H: TUBA MODELLING OUTPUT SUMMARY**

# TUBA OUTPUT (Version 1.9.9)

Transport User Benefit Appraisal TUBA (64-BIT) 1.9.9(1xB)  
 Program run on Tue Oct 03, 2017 at 17:22:15

## SENSITIVITY

Total user benefits as a percentage of total DM user costs

Mode	Modelled Years	
	2020	2034
Road	5.95%	6.18%

Economy: Economic Efficiency of the Transport System(TEE)

Consumer - Commuting user benefits							
	All Modes			Road			
Travel Time	1766			1766			
Vehicle operating costs	100			100			
User charges	0			0			
During Construction & Maintenance	0			0			
NET CONSUMER - COMMUTING BENEFITS	1865			1865			
Consumer - Other user benefits							
	All Modes			Road			
Travel Time	1263			1263			
Vehicle operating costs	100			100			
User charges	0			0			
During Construction & Maintenance	0			0			
NET CONSUMER - OTHER BENEFITS	1363			1363			
Business							
	All Modes	Road	Personal	Road Freight	Bus Personal	Bus Freight	
Travel Time	1574		1061			513	
Vehicle operating costs	180		102			78	
User charges	0		0			0	
During Construction & Maintenance	0		0			0	
Subtotal	1754		1163			591	
Private Sector Provider Impacts							
Revenue	0					0	
Operating costs	0					0	
Investment costs	0					0	
Grant/subsidy	0					0	
Subtotal	0					0	
Other business Impacts							
Developer contributions	0					0	
NET BUSINESS IMPACT	1754						
TOTAL							
Present Value of Transport Economic Efficiency Benefits (TEE)	4982						

Note: Benefits appear as positive numbers, while costs appear as negative numbers.  
 Note: All entries are present values discounted to 2010, in 2010 prices

Public Accounts		
Local Government Funding	ALL MODES	Road
Revenue	0	0
Operating Costs	0	0
Investment Costs	0	0

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Developer Contributions	0	0
Grant/Subsidy Payments	0	0
NET IMPACT	0	0
Central Government Funding: Transport	ALL MODES	Road
Revenue	0	0
Operating costs	0	0
Investment costs	15493	15493
Developer Contributions	0	0
Grant/Subsidy Payments	0	0
NET IMPACT	15493	15493
Central Government Funding: Non-Transport		
Indirect Tax Revenues	171	171
TOTALS		
Broad Transport Budget	15493	15493
Wider Public Finances	171	171

Note: Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.  
Note: All entries are present values discounted to 2010, in 2010 prices

### Analysis of Monetised Costs and Benefits

Greenhouse Gases	39
Economic Efficiency: Consumer Users (Commuting)	1865
Economic Efficiency: Consumer Users (Other)	1363
Economic Efficiency: Business Users and Providers	1754
Wider Public Finances (Indirect Taxation Revenues)	-171
Present Value of Benefits (PVB)	4850
Broad Transport Budget	15493
Present Value of Costs (PVC)	15493
OVERALL IMPACTS	
Net Present Value (NPV)	-10643
Benefit to Cost Ratio (BCR)	0.313

Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.

### TUBA Run Information

- calculations completed

#### File Summary

- Scheme File : D:\Downpatrick\TUBA Runs\DM\_vs\_DSFL\_TUBA\_Rev02.txt  
- Economic File : D:\Downpatrick\TUBA Runs\economics\_1\_9\_9.txt  
- Output File : D:\Downpatrick\TUBA Runs\DM\_vs\_DSFL\_TUBA\_Rev02.out

Elapsed time : 0hrs 0mins 4sec

## TUBA OUTPUT (Version 1.9.9)

### Scenario –Forecast 2030 without Development

#### SENSITIVITY

Total user benefits as a percentage of total DM user costs

Mode	Modelled Years	
	2020	2030
Road	4.95%	5.45%

Economy:Economic Efficiency of the Transport System(TEE)

Consumer - Commuting user benefits	All Modes	Road				
Travel Time	1704	1704				
Vehicle operating costs	82	82				
User charges	0	0				
During Construction & Maintenance	0	0				
NET CONSUMER - COMMUTING BENEFITS	1786	1786				
Consumer - Other user benefits	All Modes	Road				
Travel Time	1194	1194				
Vehicle operating costs	81	81				
User charges	0	0				
During Construction & Maintenance	0	0				
NET CONSUMER - OTHER BENEFITS	1275	1275				
Business	All Modes	Road Personal	Road Freight	Bus Personal	Bus Freight	
Travel Time	1531	1043	488			
Vehicle operating costs	140	78	62			
User charges	0	0	0			
During Construction & Maintenance	0	0	0			
Subtotal	1670	1120	550			
Private Sector Provider Impacts						
Revenue	0		0			
Operating costs	0		0			
Investment costs	0		0			
Grant/subsidy	0		0			
Subtotal	0		0			
Other business Impacts						
Developer contributions	0		0			
NET BUSINESS IMPACT	1670					
TOTAL						
Present Value of Transport Economic Efficiency Benefits (TEE)	4731					

Note: Benefits appear as positive numbers, while costs appear as negative numbers.

Note: All entries are present values discounted to 2010, in 2010 prices

Public Accounts		
Local Government Funding	ALL MODES	Road
Revenue	0	0
Operating Costs	0	0
Investment Costs	0	0
Developer Contributions	0	0
Grant/Subsidy Payments	0	0
NET IMPACT	0	0
Central Government Funding: Transport	ALL MODES	Road
Revenue	0	0
Operating costs	0	0
Investment costs	15493	15493
Developer Contributions	0	0
Grant/Subsidy Payments	0	0
NET IMPACT	15493	15493
Central Government Funding: Non-Transport		
Indirect Tax Revenues	131	131
TOTALS		
Broad Transport Budget	15493	15493
Wider Public Finances	131	131

Note: Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.

Note: All entries are present values discounted to 2010, in 2010 prices

#### Analysis of Monetised Costs and Benefits

Greenhouse Gases	55
Economic Efficiency: Consumer Users (Commuting)	1786
Economic Efficiency: Consumer Users (Other)	1275
Economic Efficiency: Business Users and Providers	1670
Wider Public Finances (Indirect Taxation Revenues)	-131
Present Value of Benefits (PVB)	4655
Broad Transport Budget	15493
Present Value of Costs (PVC)	15493
OVERALL IMPACTS	
Net Present Value (NPV)	-10838
Benefit to Cost Ratio (BCR)	0.300

Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant

costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.

#### TUBA Run Information

- calculations completed

#### File Summary

- Scheme File : D:\Downpatrick\_Jan18\_part2\DM\_vs\_DS\_Exc\_Dev\_TUBA\_Rev01.txt  
- Economic File : D:\Downpatrick\_Jan18\_part2\economics\_1\_9\_9.txt  
- Output File : D:\Downpatrick\_Jan18\_part2\DM\_vs\_DS\_Exc\_Dev\_TUBA\_Rev01.out

Elapsed time : 0hrs 0mins 6sec

## TUBA OUTPUT (Version 1.9.9)

### Scenario -Forecast 2030 with Development

#### SENSITIVITY

Total user benefits as a percentage of total DM user costs

Mode	Modelled Years	
	2020	2030
Road	8.74%	11.14%

#### Economy:Economic Efficiency of the Transport System(TEE)

Consumer - Commuting user benefits	All Modes						
Travel Time	4985						
Vehicle operating costs	407						
User charges	0						
During Construction & Maintenance	0						
NET CONSUMER - COMMUTING BENEFITS	5392						
Consumer - Other user benefits	All Modes						
Travel Time	3717						
Vehicle operating costs	426						
User charges	0						
During Construction & Maintenance	0						
NET CONSUMER - OTHER BENEFITS	4143						
Business	All Modes	Road Personal	Road Freight	Bus Personal	Bus Freight		
Travel Time	4373		2881	1492			
Vehicle operating costs	542		277	265			
User charges	0		0	0			
During Construction & Maintenance	0		0	0			
Subtotal	4915		3158	1757			
Private Sector Provider Impacts							
Revenue	0			0			
Operating costs	0			0			
Investment costs	0			0			
Grant/subsidy	0			0			
Subtotal	0			0			
Other business Impacts							
Developer contributions	0			0			
NET BUSINESS IMPACT	4915						
TOTAL							
Present Value of Transport Economic Efficiency Benefits (TEE)	14450						

Note: Benefits appear as positive numbers, while costs appear as negative numbers.  
 Note: All entries are present values discounted to 2010, in 2010 prices

Public Accounts		
Local Government Funding	ALL MODES	Road
Revenue	0	0
Operating Costs	0	0
Investment Costs	0	0
Developer Contributions	0	0
Grant/Subsidy Payments	0	0
NET IMPACT	0	0
Central Government Funding: Transport	ALL MODES	Road
Revenue	0	0
Operating costs	0	0
Investment costs	15493	15493
Developer Contributions	0	0
Grant/Subsidy Payments	0	0
NET IMPACT	15493	15493
Central Government Funding: Non-Transport		
Indirect Tax Revenues	528	528
TOTALS		
Broad Transport Budget	15493	15493
Wider Public Finances	528	528

Note: Costs appear as positive numbers, while revenues and developer contributions appear as negative numbers.  
 Note: All entries are present values discounted to 2010, in 2010 prices

#### Analysis of Monetised Costs and Benefits

Greenhouse Gases	224
Economic Efficiency: Consumer Users (Commuting)	5392
Economic Efficiency: Consumer Users (Other)	4143
Economic Efficiency: Business Users and Providers	4915
Wider Public Finances (Indirect Taxation Revenues)	-528
Present Value of Benefits (PVB)	14146
Broad Transport Budget	15493
Present Value of Costs (PVC)	15493
OVERALL IMPACTS	
Net Present Value (NPV)	-1347
Benefit to Cost Ratio (BCR)	0.913

Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in



transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.

TUBA Run Information

- calculations completed

File Summary

- Scheme File : D:\Downpatrick\_Jan18\_part2\DM\_vs\_DS\_Inc\_Dev\_TUBA\_Rev01.txt  
- Economic File : D:\Downpatrick\_Jan18\_part2\economics\_1\_9\_9.txt  
- Output File : D:\Downpatrick\_Jan18\_part2\DM\_vs\_DS\_Inc\_Dev\_TUBA\_Rev01.out

Elapsed time : 0hrs 0mins 9sec