



INSTITUTE OF
HIGHWAY
ENGINEERS

A Carbon Calculator for Local Authorities

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Who we are;

- Neil Levett – Main Board Director,
IHE
- Richard Whitaker – Business Manager,
NY Highways



Firstly, How did this project come about?



Background

Not a new idea!

At the last count there were 52 different counting tools available/being developed

LCRIG Innovation Fund

- Won £20k of funding in Nov 2021 to develop a carbon counting tool
- Original plan was to run using Power BI software
- Through development this changed to a Web based platform



You mentioned that there are other Carbon
Counting tools.
What makes this one different?



What makes this one different?

- Simple to use
- Plans carbon spend as well as counting actual used when work has been undertaken
- Uses information from the LA Asset Management system (Live data)
- For maintenance activities not just big schemes
- Standardises method of calculation aligned to Adept/FHRG & National Highways

The screenshot shows the 'VIEW JOBS' interface in the nyHighways system. The table displays the following data:

Job No	Defect	Order Value	Priority	Target Date	Status	Area	Road	Schedule Status	Gang	Date	Treatment	
<input type="checkbox"/>	319550	H2PO	£65.46	4	07-09-22	CLAIMED	BOROUGHBRIDGE	YORK ROAD	unplanned	A603		Asphalt
<input type="checkbox"/>	319553	H2PO	£73.97	4	12-10-22	CLAIMED	ROECLIFFE	BAR LANE	unplanned	A653		Asphalt
<input type="checkbox"/>	321894	H2PO	£1996.87	4	03-09-22	CLAIMED	HARROGATE	FOOTWAY FROM HA...	unplanned	A653		Asphalt
<input type="checkbox"/>	322817	HIPO	£117.56	4	29-09-22	CLAIMED	RIPON	LICKLEY STREET	PLANNED	Aidan's hot gang 1	30-11-22	Thermal
<input type="checkbox"/>	324382	HIPO	£587.79	4	27-11-22	APPROVED	CASTLE BOLTON	INTAKE PLANTATL...	unplanned	A162		Asphalt
<input type="checkbox"/>	325506	H2PO	£1035.52	4	11-11-22	ALLOCATED	SHERIFF HUTTON	CALVERTS GARTH	unplanned	A4G1		Asphalt
<input type="checkbox"/>	325572	H2PO	£261.84	3	08-09-22	APPROVED	TADCASTER	LEEDS ROAD	unplanned	A762		Asphalt
<input type="checkbox"/>	325878	HIPO	£104.04	5	08-11-22	CLAIMED	HARROGATE	ROAD REAR OF BE...	unplanned	A6G3		Asphalt
<input type="checkbox"/>	325938	HIPO	£1449.4	4	01-09-22	CLAIMED	COPT HEWICK	DISHFORTH ROAD	unplanned	A6G4		Asphalt

Local Authorities use different Asset Management System and those that use the same one operate it differently.
How does your system cope with this?

Configuration

- Easy to configure for different LA needs
- System is configured to accept the data rather than the other way around.
- Easy to add new suppliers and treatment types
- Easy to change the baseline treatment
- Reporting panel to meet local need

nyHighways
Treatments

Add Treatment

AC 6mm Surface

Treatment Name
AC 6mm Surface course 190 Pen - Hot material

Display Name
Asphalt

Material

Asphalt

Spray

Flowable Mastic

Thermal

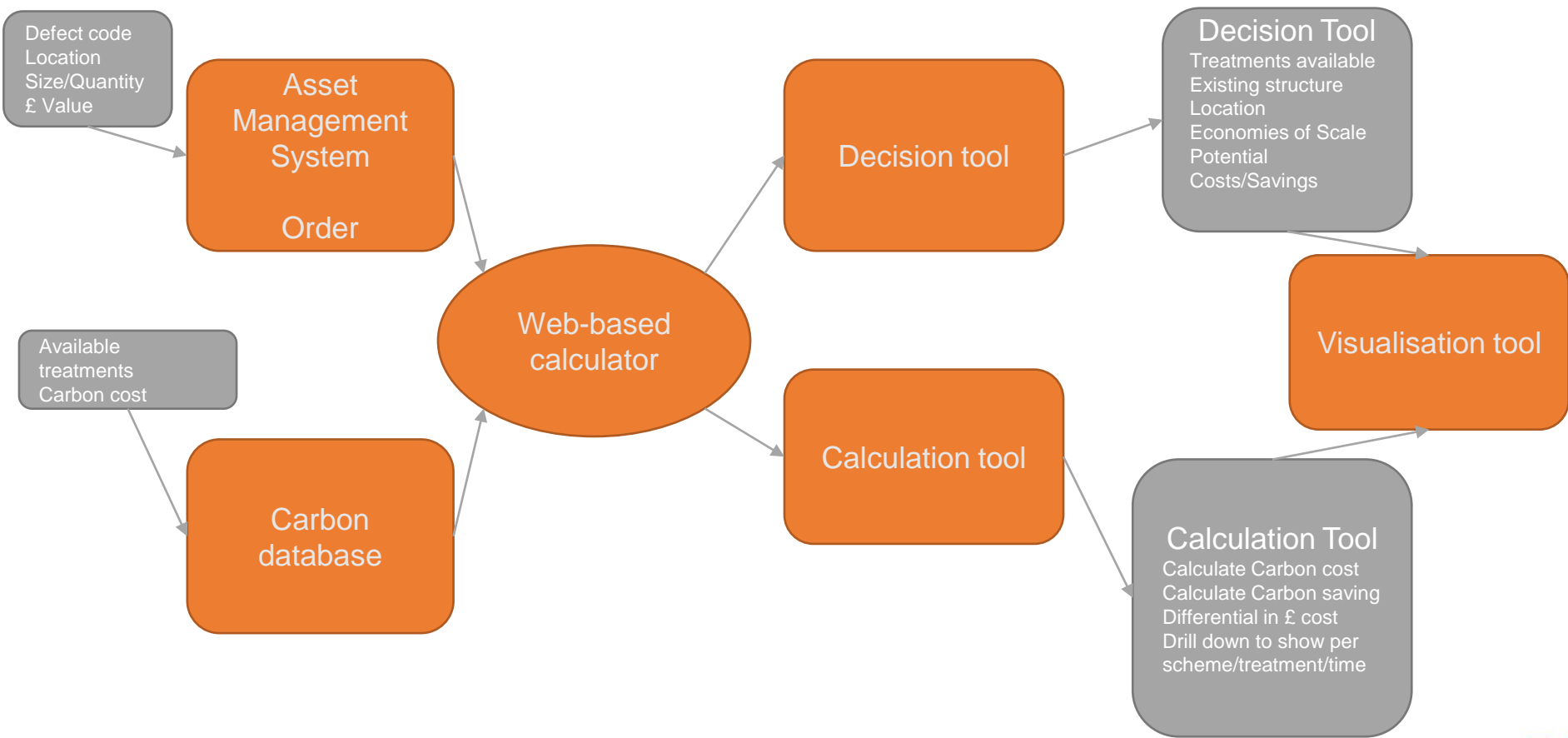
1	1
Qty	Avg
Qty	Avg
Qty	Avg

Close Update

So you have the Data in the system, what does it do?



What does it do?



It looks good so far, What are the next steps?



Next Steps

HELP required.....

- Need Local Authorities to help test the configuration module
 - Support already from Lancashire, Blackpool and Blackburn but need for more
- Add their data to check the system
- Feedback on their experiences and help put the development plan together
- Release through LCRIG members for other Local Authorities to use

And what are your plans to develop the system further?

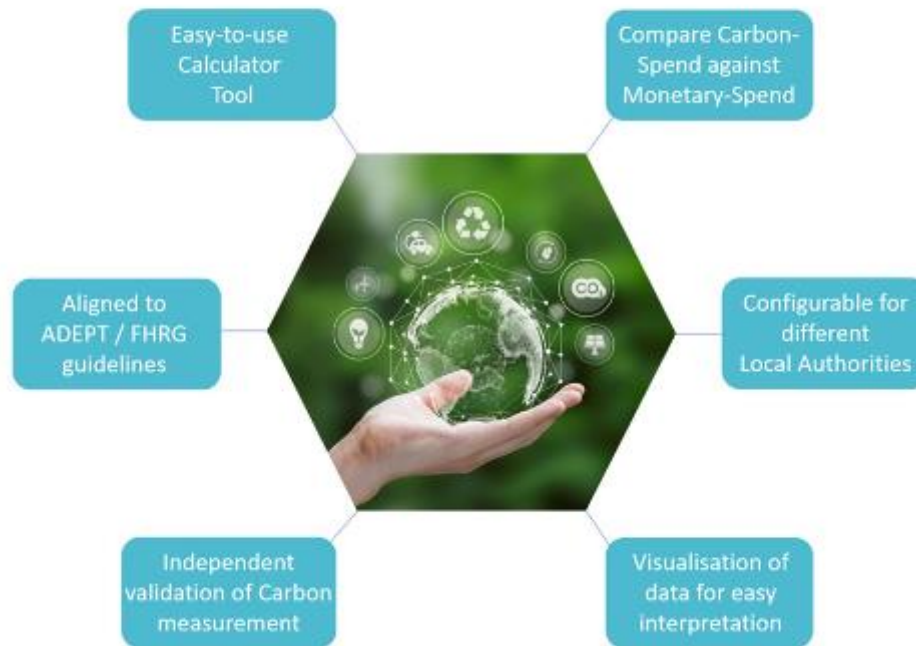


Future Development

- Development will include Artificial Intelligent Learning to improve the accuracy of the calculations –Further funding won from Innovate - uk
 - Mileage of vehicles from telematics
 - Data from suppliers (originating depot)
- Validated against standard counting methodology – NH to release standard methodology
- Business Plan is to fund the upkeep of the website by suppliers and keep procurement simple for LAs
- Captures the Carbon saving which could be traded in the future
- Calculations will support Climate Emergency data requirements

CONNECTED ENVIRO NET CARBON CALCULATOR TOOL

Transforming business processes for Net Zero targeting





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Thank you

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