



CONSTRUCTION

Leicester City Local Transport Plan

Summary

The success of Leicester City Council's Local Transport Plan relies on building and improving the transport infrastructure in the city.

Leicester City Council recognised that its system of Performance Indicators (PIs) were not robust enough, and tasked the Highways and Transportation Division with analysing design projects to identify where the PI gaps were and why officers could not offer relevant data. Leicester also benchmarked their results against National Performance Indicators, summarised problems encountered and devised a forward plan.

The limited benchmark data indicated that the performance of the design groups hovered around the median score for the construction industry as a whole, work was needed to plug data gaps and measure future service improvements.

Quote

“Our Transport Vision for Central Leicestershire is to develop a transport system which enables everyone to take part in all aspects of everyday life, at a reasonable cost”

Aman Mehra,
Procurement and Programme Manager

Improvement through efficiency



East Midlands

emce.gov.uk

Project background

The Local Transport Plan for the City of Leicester has six aims:

- to improve access to employment, leisure, education, housing, health care and shopping
- to promote social inclusion for those without access to a private motor vehicle, disabled people, women, older people, ethnic minorities and the unemployed
- to improve quality of life by reducing the pollution, noise, congestion, delay and severance caused by traffic and enhance the built and natural environment
- to encourage and develop the more sustainable transport modes of walking, cycling and public transport and, where appropriate, to bring about a reduction in travel overall
- to improve all aspects of transport safety and security
- to support the local economy and encourage economic growth in suitable locations with particular regard to City Centre.

Like many corporate aims, it is not possible to measure their achievement without relevant metrics. Leicester's Highways and Transportation Division decided to analyse its construction-related PIs to understand the difficulties that officers encountered with measurements and discover how Leicester performed against 'equivalent' National PIs.

What they measure

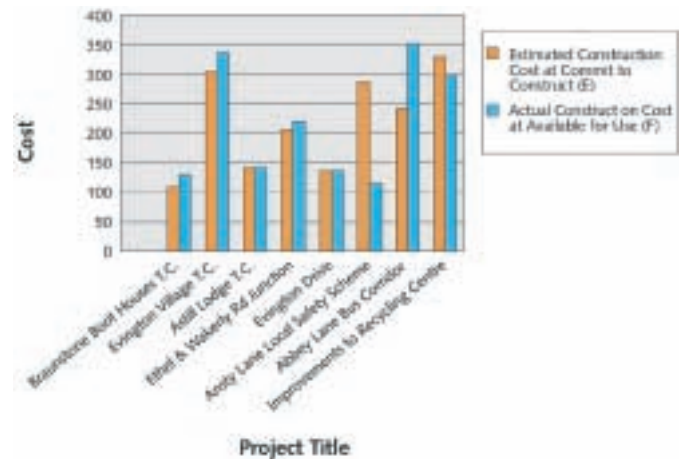
Data was compiled from teams within the Civil Engineering Design Group to compare the average outcomes of several projects. In some cases there was insufficient data, the main reason why baseline figures had not been estimated was because a scheme had changed so much that comparison became meaningless.

Simple bar charts were used to see how projects within the design teams compared for seven of the national Construction Industry KPIs. Although there were some gaps in data, the following examples show typical outcomes.

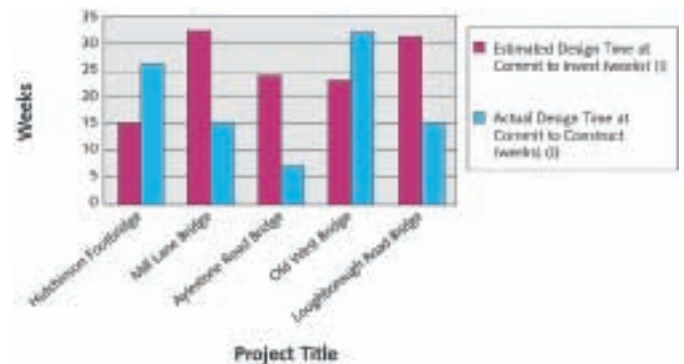
Example measures

Predictability of construction cost: Highways & Drainage Design Team

The following graph is an example comparison charting the the 'Estimated Construction Cost' (Orange) of an individual project against the 'Actual Construction Cost' (Blue).



This second graph an example comparison charting the 'Estimated Design Time' (Pink) of an individual project against the 'Actual Design Time' (Blue).



A benchmark score measures how well the organisation compares with the rest of the construction industry, for example 80% means in the top 20% of performers.

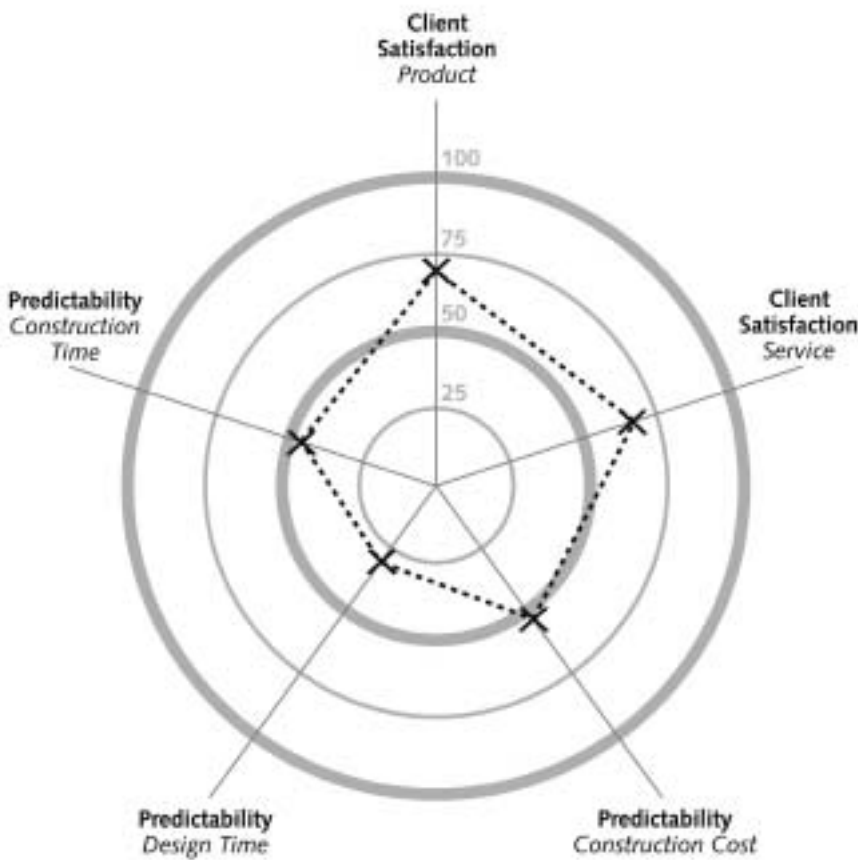
Example measures

Data was also compiled to calculate average benchmark scores for seven of the national KPIs.

Average benchmark scores for design teams	Client satisfaction - product	Client satisfaction - service	Predictability – design cost	Predictability – construction cost	Predictability – design time	Predictability – construction time	Defects
Highways and drainage	No data	No data	No data	58%	33%	33%	No data
Bridges	66%	64%	No data	35%	Beyond scale	60%	No data
Traffic and junction improvement	No data	No data	No data	60%	31%	47%	No data

Finally, they averaged the results for the whole design group and plotted the results on a radar chart.

	Client satisfaction - product	Client satisfaction - service	Predictability – design cost	Predictability – construction cost	Predictability – design time	Predictability – construction time	Defects
	66% but based on one group only	64% but based on one group only	No data	52%	32% but based on two groups only	47%	No data



Performance of Highways and Transport Division Benchmarked to the UK Construction Industry

Conclusions

Given the many gaps in data, the most optimistic conclusion is that the division performs broadly around the industry median for the whole industry.

In civil engineering it can be difficult to identify the end user. Therefore gauging the degree of 'customer' satisfaction poses questions about how to identify which people to ask and how to sample their responses. Leicester still has a client/contractor mentality, indicating that the cohesive culture is not fully embedded yet. Poor communication between teams may be symptomatic of insufficient meaningful consultation.

PI data is missing because:

- Definitions of PIs are inconsistent
- Managers were not prioritising PIs
- Schemes tend to stop, start and change
- There is more attention to controlling cost than time
- Officers perceive collecting PI data as just another burden because the business case for PIs is not fully understood
- Lessons from both good and bad experiences are not shared enough.

Lessons learned

- Understand the processes that will have a beneficial impact on performance, and then choose indicators that reflect these
- Ensure that there are clear strategic objectives based on the knowledge of what improves service and focus on priorities for improvement
- Indicators should be built around things that are easy to measure. If they are difficult to measure, they are probably not the key to success
- Good targets should be SMART - Specific, Measurable, Achievable, Relevant and Timed
- Staff need to 'own' their indicators and should be able to understand and accept the validity of corporate or national indicators and targets
- In order to close the communication gap, hold one-to-one and/or group meetings to iron out any barriers to progress
- Take care of issues and concerns via proper and meaningful consultation.

Develop a mechanism to bring out and share good and bad lessons learnt. One way of doing this is to reward individual teams that are willing to share their good and bad experiences with others. Taking teams to an external base for team building can also be effective.

Wide variances which lead to poor PI results can be easily blamed on changes in scope, but this is not a good reason to discontinue measuring PIs. Poor scores are not the problem; you need to determine the reasons behind poor scores before you can fix them.

The future

The collection of PIs is now a core activity within Leicester's Highways and Transportation Division. The Strategic Service Plan includes a hierarchy of PIs that distinguish between key and secondary PIs, with the intention to direct efforts into improving key PIs.

Transferability

Leicester's Highways and Transportation Division are keen to share their experiences with others, especially after they have bedded in their new improved systems. The hierarchy of PIs are suitable for transfer so long as the right people within an organisation take ownership of PIs and are intent on turning measurements into improvements.

Contact

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