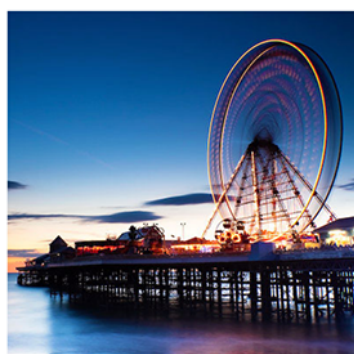


Blackpool Council

Highways and Traffic Services

LEAN Review 2017/18

Blackpool Council



Background

Blackpool Council's road network is one of the authority's biggest and most valuable assets, worth £648m.

Blackpool's road network is a vital element of the town's local economy. Over 64,000 residents have access to a motor vehicle in Blackpool, while 44% of tourists use the town's highways network to visit the town. Over 17 million tourists visit each year, contributing around £33bn to the economy and supporting around 24,000 jobs.

Maintaining and upgrading the road network to a high standard:

- ensures safe and sustainable access to shops, schools, healthcare and other amenities for residents
- enables efficient business operations
- provides good access routes for visitors into and around the town

Investment in the road network

Blackpool Council has a Road Asset Management Strategy (RAMS) that analyses the requirements for its road network and carries out treatments in the most cost-effective and timely way.

Through Project 30, Blackpool Council has invested heavily over the last five years, with a £30m project resurfacing 40 miles of carriageway and footway. As well as improving 20% of the entire network, this investment also targeted areas of the town that had high levels of highway insurance claims from members of the public. Project 30 has now been successfully completed.

The project, assisted by recent government reforms on claims, has substantially reduced the pay-outs for tripping claims from 2010 which was almost £2m to £282k in 2016/17. This looks to go even further with total pay-outs in November 2017 only reaching £75k with four months of FY 2017/18 to go. Every member of the highways team was involved in this project and, since its completion, have continued to work on reducing the risk of highway defects resulting in insurance claims.

In addition to Project 30, a £3.6m project, funded from prudential borrowing, delivered repair and renewal works to Yeadon Way, a vital thoroughfare into the town from the M55. This project was completed on time and under budget.

Blackpool Council was successful in a bid for funding via the Department for Transport's Highway Challenge Fund and the Local Enterprise Partnership. The funding supports a bridge maintenance investment programme of over £11m, which is currently ongoing until 2018/19. Many of these bridges are in a poor state of repair. The investment programme

will ensure that all 10 bridges are brought up to a good standard, to prevent the future risk of sudden failure and the associated economic and social impact on the town.

Investment on an annual basis includes a planned patching programme which improves roads with larger highway defects and which has resulted in over £500,000 of essential works in key areas of the residential network susceptible to tripping claims.

Safety maintenance

A robust safety maintenance regime is in place, which identifies and repairs safety problems on the highway on a reactive basis. Most of this maintenance is carried out by Blackpool Council's Highways Engineering Services team.

Department for Transport self-assessment

The Department for Transport (DfT) requires all highway authorities to score themselves against a range of criteria which show how far each authority has progressed in achieving efficient and sustainable management strategies for its highway assets. Authorities are banded 1 – 3, with 1 being the lowest.

Blackpool Council achieved the highest band in the self-assessment completed in February 2017 and will again in 2018.

LEAN review

Objective

The objective of a Lean review is to provide better value for customers by eliminating any processes that do not add value or are wasteful. This means establishing that all aspects of the service are efficient, provide value for money and deliver good customer service.

Blackpool Council Highways undertook a Lean review in order to:

1. Provide transparency and clarity about activities and cost
2. Understand where processes required change to improve efficiency
3. Benchmark and update the repairs ordering system and schedule of rates for the Engineering Services in-house service delivery
4. Improve management information and ensure consistency between different functions such as policy and finance

Scope

The Lean review focused primarily on the activities, processes and systems of the internal Engineering Services team based at Layton Depot.

However, the review also encompassed higher level activities relating to workstreams, policy and accountancy to ensure efficiency and eliminate any duplication in work.

<i>Teams/Stakeholders</i>	<i>Funding Streams</i>
Highways & Traffic Management	Integrated Transport Block (ITB)
Highways Engineering Services	Highways Capital Allocation (HCA)
Transport Policy	Self-assessment authority banding allocation
Accountants	Bid funding
Procurement	<i>Documents</i>
External Contractors	Council Plan
Portfolio holder, Environmental Services & Highways	Road Asset Management Strategy (RAMS)
Residents	Local Transport Plan (LTP)
	Legislation and statutory instruments

Staffing resources

<i>Highways and Traffic</i>	
Officers	8
Streetworks Inspectors	3
Administrative staff	2
<i>Highways Engineering Services</i>	
Officers	2
Administrative staff	2
Highway Inspectors	6
Tramway staff	8
Operatives	13
<i>External contractor: Bethells</i>	

Roles

Strategic Leader	Will Britain, Head of Highways and Traffic Management, Blackpool Council
Operational Leader	Mark Anderson, Engineering Manager, Blackpool Council
Operational Team	Highways Engineering Services, Blackpool Council
Critical Friend	Paula Claytonsmith, Director of Strategy & Government Affairs, Gaist
Expert	Neil Mc Ardle, Highway Asset Management Officer, Blackpool Council

Purpose

The first task was for the team to define the purpose of the service.

Example 1 - *“to enable the flow of all traffic for all users on the existing network and to improve it where/when we can in a safe, secure, unobstructed manner in a timely way”*

As thorough as this definition is, this is nevertheless an organisational and hierarchical view of the purpose of the service. A systems approach requires the thinking to be from the ‘outside in,’ i.e. from the customer’s perspective, and it took some lengthy debate, discussion and numerous attempts at defining purpose before the team agreed on:

“Make the network work in the best possible way” (for all users)

The ‘for all users’ was added in brackets because most customers focus on how the network works in the best possible way for their own individual needs whereas the Council must ensure that the highway service creates a balance for the needs of all road users.

Activity: Workstreams

A thorough review was undertaken on each workstream, broken down into type (e.g. schemes, planned maintenance, reactive maintenance)

The review included:

- How do we receive work?
- What types of task exist?
- How is it actioned?
- Who does what and when?

System diagrams were mapped to show all activities:

1. A high-level overview of the workflow for all highway and traffic activities
2. Highway and traffic demand workflow
3. Highways enquiry process
4. Highway defect job process

(See Appendix A for workflow diagrams)

Once the workflows had been mapped, each process was analysed to highlight any inefficiencies, duplication or other issues, along with an estimate of the cost in terms of time spent on inefficient processes. Solutions were then identified to rectify problems or improve the workflows.

The main findings were as follows:

1. Implement closer working with the Policy team to ensure awareness of any changes to the LTP programme

2. Improvements to the ESB software are required e.g. mapping, search criteria
3. A flexible management reporting system within the ESB software is required
4. A future move to mobile electronic devices linked to ESB would reduce duplication and allow more information to be recorded in real time
5. A more efficient bulk-ordering system for Engineering Services highway items would reduce job delays

(See Appendix B for detailed findings and solutions to date)

Activity: Engineering Services

This is an in-house service which comprises 31 staff working on over 9,800 repair jobs at a cost of £480,000 per year, repairing 88% of the safety defect reports that come into Highways. (The remaining 12% are carried out by other contractors).

The team receive and record jobs, select and order the appropriate materials, deploy operatives to undertake the reactive repairs, and log the action taken.

The expertise of the Engineering Services operatives may also be required for planned maintenance works from the annual programme. In these cases, a team from the external contractor is deployed to provide reactive repair duties.

Benchmarking was carried out against private companies and with other local highway authorities to compare costs and to review the outdated schedule of rates for Engineering Services work. Market testing included:

1. Comparison of Engineering Services scheme costs against private sector contractors on the Council's framework
2. Comparison by job role (hourly and daily rate) against a number of private companies
3. Comparison of schedule of rates for each type of highway works with other authorities in the Local Councils Road Improvement Group (LCRIG)

The findings are as follows:

Private sector:

1. Blackpool Council are comparable with Company B, the lowest priced on the Council's framework, for all scheme work apart from Series 1100: Kerbs, Footways and Paved areas. Including Series 1100, Blackpool Council are comparable with Company C, at 10-11% more expensive than Company B, and are less expensive than Company A.
2. Blackpool Council are below the average market rates for an engineer, senior engineer and engineer-manager, and are mid-point for a flagger/welder. However, Blackpool Council rates are higher than the comparators for a technician/labourer and principal engineer.

Local authority rates:

1. Comparing all types of highway works (where comparisons are available), Blackpool Council Engineering Services rates are cheaper than Local Authority 1, with Local Authority 1's works costing overall an additional £2,446.78.
2. In comparison with Local Authority 2, a breakdown of rates shows that Blackpool Council overall are more expensive by £2,455.25. However, this is comparing Blackpool as a small unitary to large county shire which can achieve economies of scale due to its size.

NB: Blackpool Council Engineering Services rates include employer's NI and pension contribution.

Conclusion

Workstreams

The systems refinements that are required have been split into three phases. The first, most expensive, phase was estimated to cost £5,850.00 but will provide value for money by reducing errors, duplication and staff time. Phase 2 and 3 are yet to be costed and cannot be started until Phase 1 is completed, tested and signed off.

A minimum of 1,328 hours of 'wasted' staff time can be saved each year by introducing all the proposed changes (Phase 1 – 3) to improve the processes and systems. In implementing the recommendations identified by the review, the council will instead be making best use of valuable officer time to achieve the required standards of service at a time when work demands are increasing significantly. For example, enquiries have increased by 23% in the last 3 years whilst the service has lost 3 members of staff – doing more for less.

The improvements will also enable staff to deal more effectively with enquiries and Member requests. The changes to the system provide a more intuitive method of working which helps officers to communicate in a more efficient manner and focuses on productive and efficient service delivery to customers.

Phase 1 is nearly complete with the identified actions either achieved or in progress.
(See Appendix B for detailed findings and solutions to date)

Engineering Services

From the analysis undertaken, it can be demonstrated that Blackpool Council provide competitive value for money. Based on the results of the market testing, the Council is more expensive in the provision of a technician/labourer and for schemes relating to kerbs, footways and paved areas. However, this needs to be set against the value of training, quality assurance and local knowledge which the Engineering Services team provide. Unlike

external contractors, the Engineering Services team also have the expertise to cover a wide range of highway tasks, from individual reactive repairs to larger planned maintenance schemes.

Blackpool Council has cheaper rates through the Engineering Services team for highway works compared to Local Authority 1, and compares well with the larger Local Authority 2 rates which achieve economies of scale through larger county-wide programmes.

An in-house service retains costs and income within the Council whilst providing local jobs for local people. The Engineering Services supports Core Objective CO9 in contributing to the Council's strategy to reduce economic inequalities through a commitment to skills development and employment opportunities for Blackpool's residents.

By retaining a strong internal Engineering Services, Blackpool Council is also able to generate significant revenue through delivery of construction works as part of S38 and S278 agreements with developers.

Material costs can be reduced for Engineering Services if it can acquire materials in partnership with larger local authorities, and this will be explored further through LCRIG.

Recommendations

The recommendations arising from the Lean Review 2017/18 are:

1. Implement Phase 1 of the Systems Refinements in conjunction with IT and the system provider
2. Work up costs and number of development days required to implement Phase 2 and 3 of the Systems Refinements.
3. Explore mobile working options in the longer term, once Systems Refinements are enabled
4. Continue to provide reactive repairs and planned schemes through the in-house Engineering Services
5. Explore the sharing of materials procurement with other local authorities to reduce costs
6. A further review is scheduled for 2023/24.

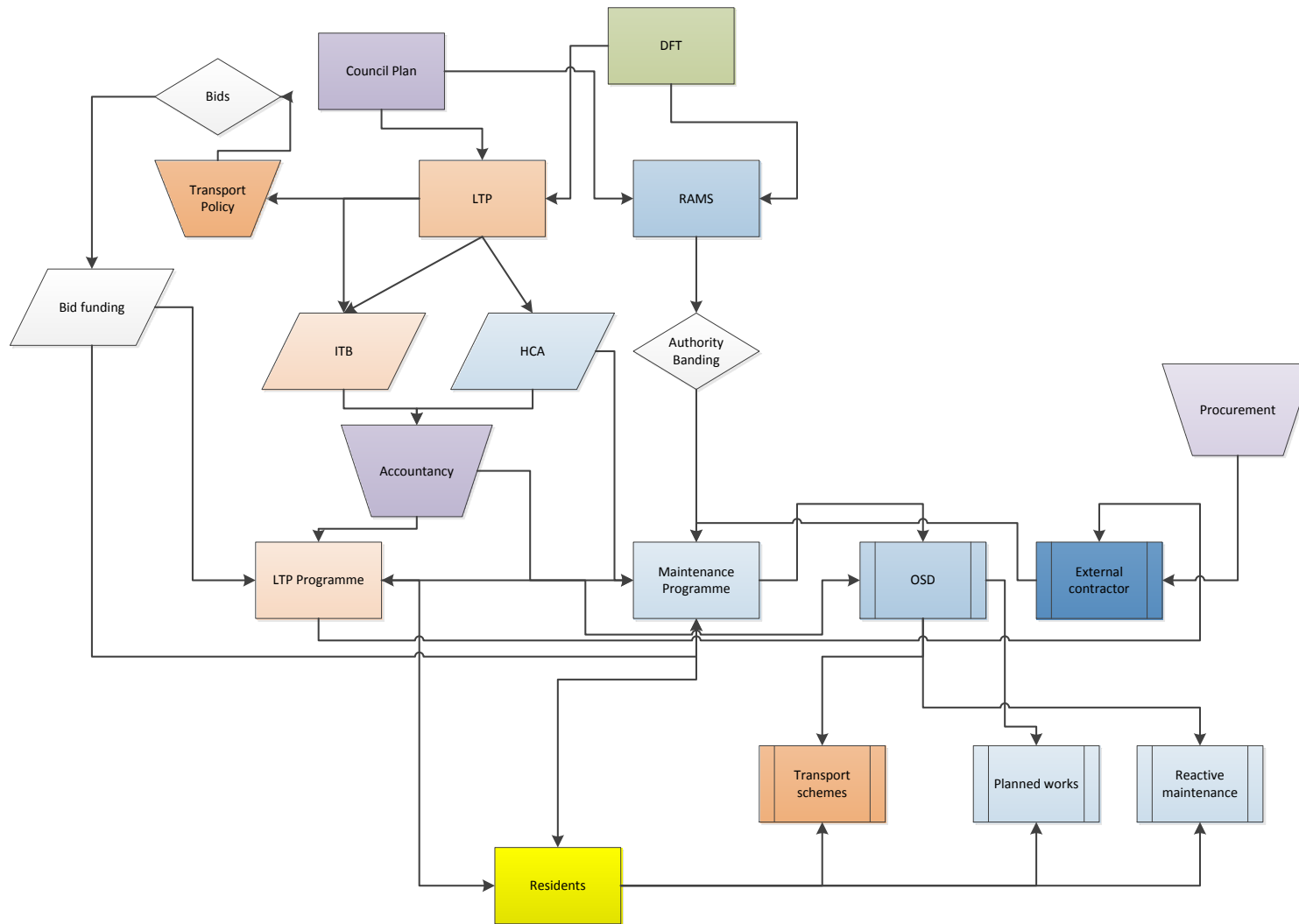
Implementation

The changes to the ESB system for Phase 1 are to be completed by Quarter 4, 2017-8. This date ties in with the proposed Highways Permit Scheme which requires additional resource from the Highways and Traffic team to function.

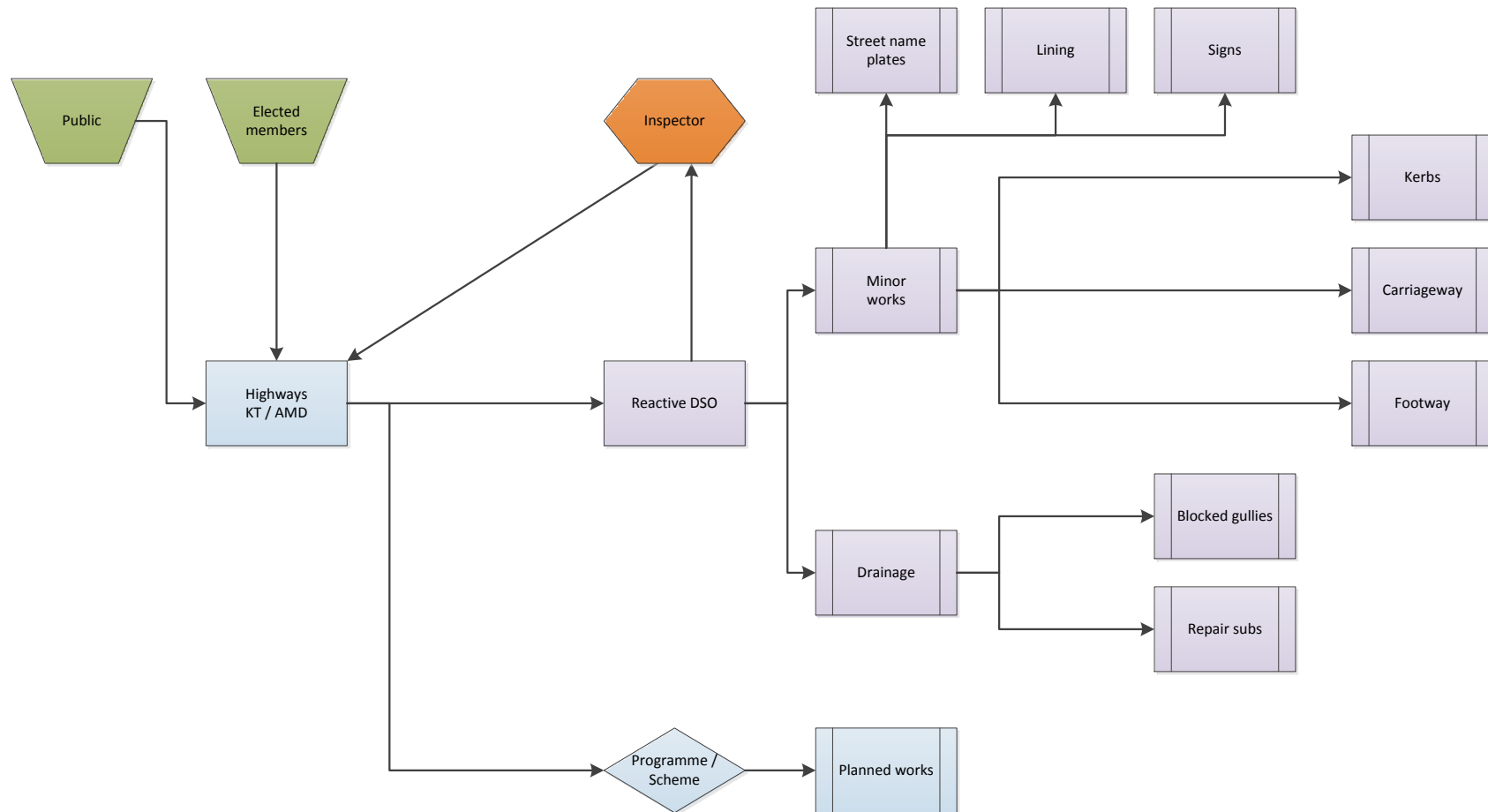
Phase 2 and 3 will be costed with proposed target dates following the completion of Phase 1. The current estimate for Phase 2 is approximately £5,000.

Appendix A – workflow diagrams

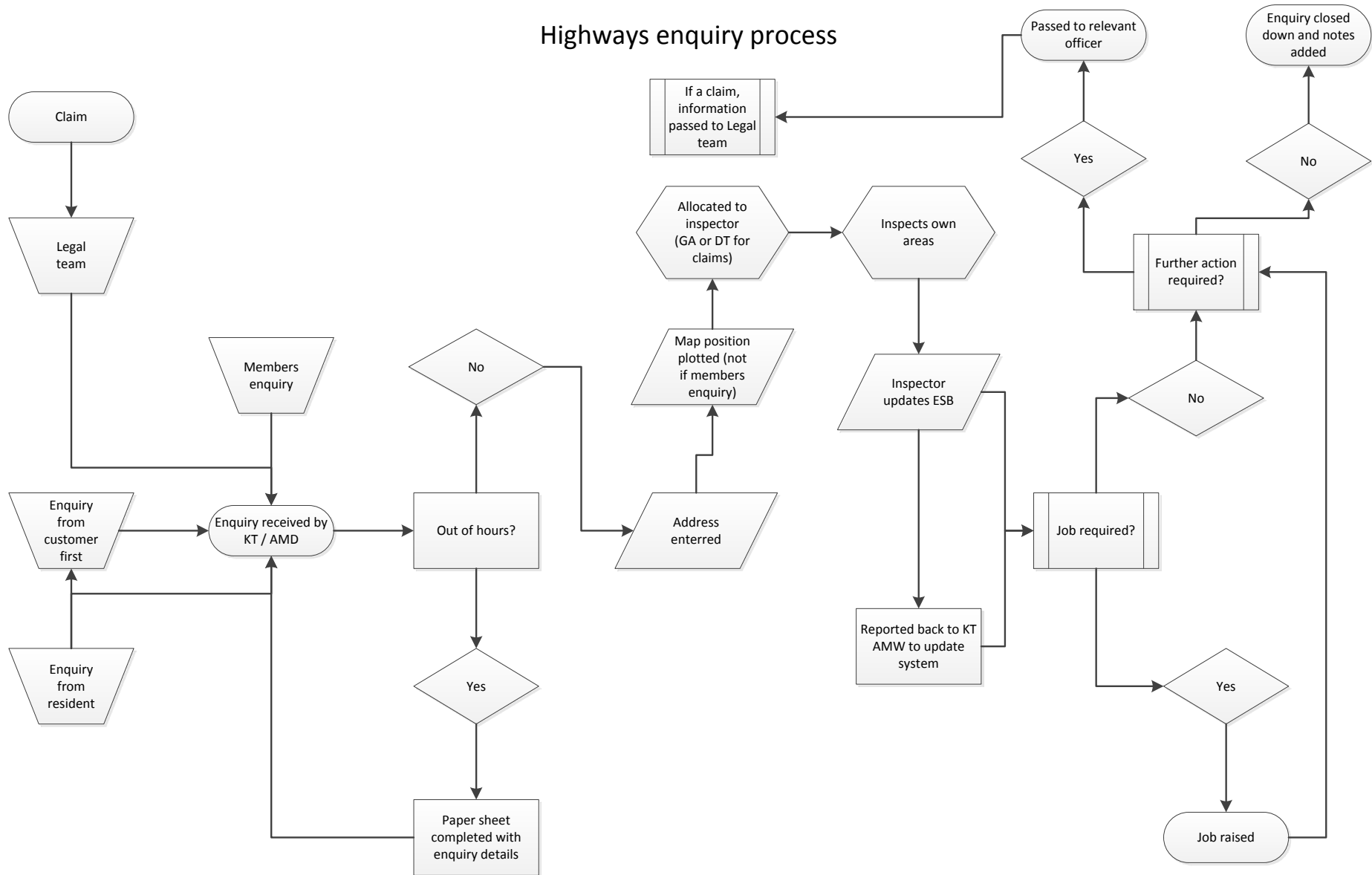
High level overview



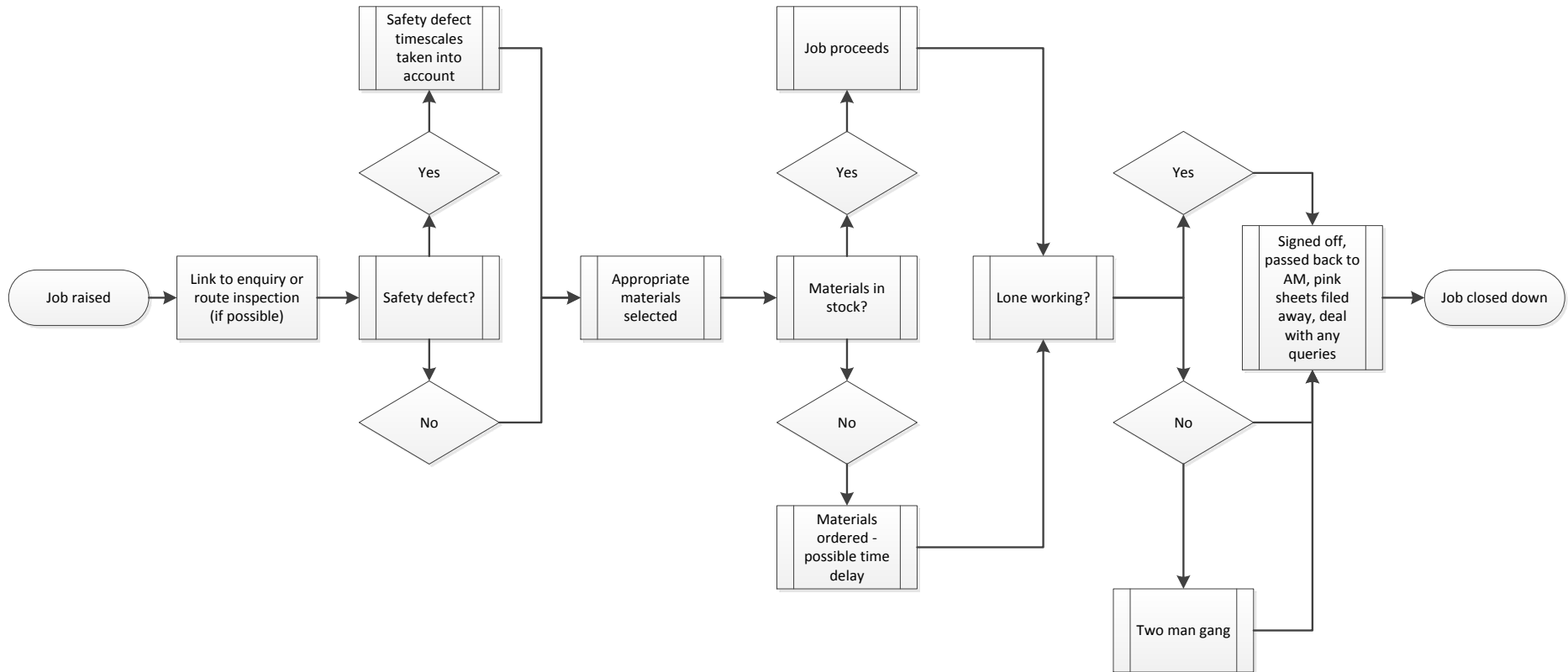
Highways & Traffic demand work-flow diagram



Highways enquiry process



Highways defect jobs process



[Appendix B - Detailed findings and solutions.xlsx](#)

[Note – this is attached as a separate PDF document.](#)

List of required reports

Flexible reports required

Highways & Traffic

1. DfT return

Department for Transport

Carriageway route length treated

Definitions of treatment type (a) to (f) are given here in the [Guidance Notes](#)

Do not enter any figures in the table below for concrete roads

Road Class (km treated)

2012/13	A	B	C	B & C (1)	U
a. Reconstruction	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
b. Overlay	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
c. Resurfacing	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
d. Surface Dressing	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
e. Thin Surfacing	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
f. Programmed Patching (2)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

(1) Only enter when separate figures for B and C class roads are not available
(2) Other planned repairs which have not been included in (a) - (e). Excludes reactive repairs and patching

[FAQ](#) Page 3 of 7 [back](#) [save & exit](#) [next](#)

2. Carriageway route length / area treated, by Road Class and type.
3. Amount spent on pothole repairs by year
4. Amount spent on claims by year
5. Number of potholes ordered for repair
6. Number of third party insurance claims received relating to potholes
7. Number of third party insurance claims settled relating to potholes
8. Average cost of claims settled relating to potholes
9. Total cost of claims settled relating to potholes

Highways Inspectors

1. Inspections completed within timescale (current report is difficult to use)
2. Number of enquiries per inspector
3. Enquiries inspected within timescale
4. Possible: Distance inspected per inspector
5. Possible: Report of who has completed a defect

Engineering Services

1. Number of Potholes: carriageway and footway
2. Number of Viafix cold-lay repairs
3. Number of Gullies
4. Number of Kerbs
5. Number of Drainage
6. Number of Category Jobs
7. Number of jobs rechargeable
8. Number of jobs per inspector
9. Number of jobs left by due date
10. Number of jobs failed
11. Number of jobs completed by (name/job title)

Appendix C

HIGHWAYS AND TRAFFIC MANAGEMENT SERVICES
GENERAL FUND OUTTURN YEAR ENDING 31 MARCH 2016
HIGHWAYS AND TRAFFIC MANAGEMENT SERVICES

SUBJECTIVE ANALYSIS	2015/2016 ADJUSTED CASH LIMIT £ '000	2015/2016 ACTUALS £ '000	2015/2016 VARIATION £ '000
-	-	-	
<u>EXPENDITURE</u>			
EMPLOYEES	1,804	1,775	(29)
PREMISES	297	472	174
TRANSPORT	269	310	41
SUPPLIES AND SERVICES	322	1,799	1,477
THIRD PARTY PAYMENTS	411	1,786	1,375
TRANSFER PAYMENTS	-	-	-
SUPPORT SERVICES (NOT INCLUDED BELOW)	5	3	(2)
CAPITAL CHARGES (NOT INCLUDED BELOW)	2	-	(2)
TOTAL EXPENDITURE	3,110	6,144	3,034
<u>INCOME</u>			
CUSTOMER & CLIENT RECEIPTS	422	912	(489)
GOVERNMENT GRANTS	-	-	-
RECHARGES	340	352	(12)
OTHER GRANTS, REIMBURSEMENTS & CONTRIBUTIONS	605	2,989	(2,384)
TOTAL INCOME	1,367	4,252	(2,885)
CONTROLLABLE NET EXPENDITURE	1,743	1,892	149
CDS	210	210	-
CAPITAL CHARGES	12,276	12,276	
RECHARGES (CDS INCOME)	-	-	-
TOTAL NON-CONTROLLABLE EXPENDITURE	12,486	12,486	
TOTAL NET EXPENDITURE	14,229	14,378	149
<i>COST PER '000 POPULATION</i>	11	12	1

Testing the Market (1) Framework comparison

As part of this review, the scheme costs of Blackpool Council's Engineering Services were compared initially to three contractors – Company B came out at the cheapest. Blackpool Council were not the most expensive and were comparable with Company C as 10%-11% more expensive than Company B. Company A's costs were 14% more than Company B. Excluding Series 1100, Blackpool Council are comparable to Company B, within 1.5%.

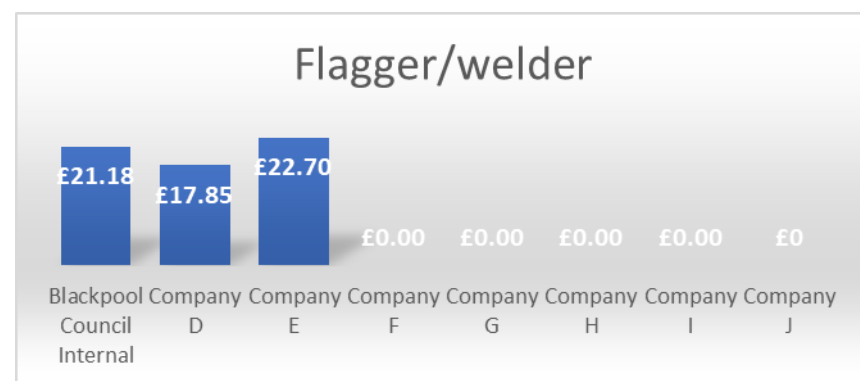
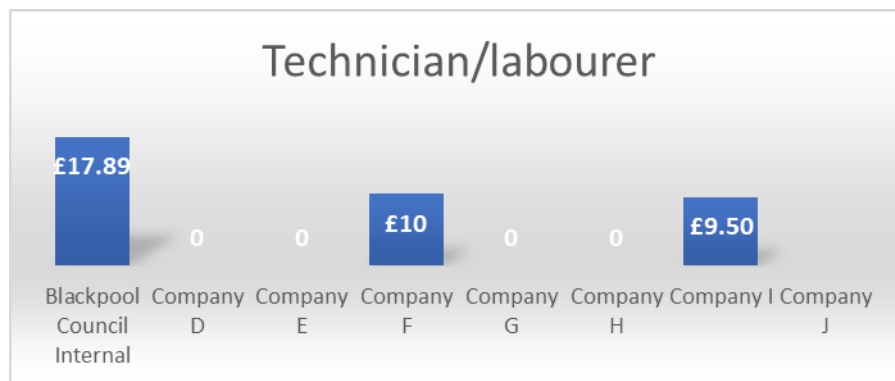
Financial Summary				
Series	Company A	Company B	Company C	Blackpool Total
Series 100 Preliminaries	46,898.04	29,596.63	43,450.00	10,860.00
Series 200 Site Clearance	-	-	-	-
Series 500 Drainage	45,373.69	40,194.03	35,663.25	38,823.50
Series 600 Earthworks	34,962.41	34,358.13	49,704.00	55,937.00
Series 700 Pavements	8,863.39	4,750.66	4,960.50	7,839.60
Series 1100 Kerbs Footways, Paved areas	70,920.35	68,008.66	66,914.20	87,256.00
Series 2700 Accommodation Works and Works for Statutory Undertakers	11,722.52	14,807.37	9,475.00	13,780.00
Sub-Total	218,740.40	191,715.47	210,166.95	212,852.10
Out of Hours Enhancements	-	-	-	-
Total	218,740.40	191,715.47	210,166.95	212,852.10
Series excluding 1100	£ 147,820.05	£ 123,706.81	£ 143,252.75	£ 125,596.10

Testing the market (2)

Additionally, Blackpool Engineering Services job roles by SOR were compared to a number of other companies.

	Technician/Labourer		Flagger/Welder		Engineer		Senior Engineer		Engineer - Manager		Principal Engineer	
	TOTAL HOURLY RATE	Total Day Rate	TOTAL HOURLY RATE	Total Day Rate	TOTAL HOURLY RATE	Total Day Rate	TOTAL HOURLY RATE	Total Day Rate	TOTAL HOURLY RATE	Total Day Rate	TOTAL HOURLY RATE	Total Day Rate
BC Internal	£17.89	£143.12	£21.18	£169.44	£24.05	£192.40	£24.96	£199.68	£36.48	£291.84	£46.08	£368.64
Company D			£17.85	£142.80								
Company E			£22.70	£181.60								
Company F	£10.00	£80.00			£33.50	£268.00						
Company G							£20.50	£164.00				
Company H					£27.50	£220.00	£29.00	£232.00	£32.00	£256.00	£38.00	£ 304.00
Company I	£9.50	£76.00			£29.50	£236.00			£50.63	£405.00		
Company J					£22.50	£180.00	£32.50	£260.00	£42.50	£340.00	£31.00	£248.00

The Blackpool Council rate for Technician / Labourer is 79%-88% higher than the two companies who supplied figures. The Principal Engineer rate was also higher at 21%- 49% with two different companies. The roles in between, however, were mostly lower than the market rate; a Flagger / Welder ranged between 7% cheaper to 19% more expensive, an Engineer ranged from 28% cheaper to 7% more expensive. A Senior Engineer ranged from 23% cheaper to 22% more expensive and an Engineer Manager ranged from 28% cheaper to 14% more expensive.



Appendix C

