

<b>Committee(s):</b>	<b>Date(s):</b>
Planning and Transportation	25 February 2014
<b>Subject:</b> Update: Management of Public Lifts, Escalators and the Millennium Inclinator	<b>Public</b>
<b>Report of:</b> <b>City Surveyor</b>	<b>For Information</b>
<p style="text-align: center;"><b>Summary</b></p> <p>This report is to provide the Committee with a 3 month status report with regard to management of the public lifts/escalators and the Millennium Bridge inclinator. It details the approach being taken to improve and sustain performance.</p> <p style="text-align: center;"><b>Background</b></p> <p>The City Surveyor maintains 210 lifts and 7 escalators for the City. This does not include the Housing Estates. This portfolio includes 19 public lifts, 4 of which are located in car parks. Originally there were 8 lift maintenance suppliers, following the PP2P initiative led to a single company, Apex Lifts commencing on 2 July 2012.</p> <p>The Action Plan introduced to address sub-standard performance which was tabled at this committee 26 November 2013, has been carried out. All actions within the Action Plan have been introduced and have resulted in an improved approach.</p> <p>A copy of the action plan is included as Appendix 1.</p> <p style="text-align: center;"><b>Recommendation</b></p> <p>Members are asked to note the report.</p>	

## Main Report

### Lifts and Escalators

#### Monitoring & Performance

1. To improve Apex Lift's response time to any breakdown, each public lift and escalator has been fitted with an Electronic Monitoring Unit (EMU). In addition, to support the EMU service, dedicated BT phone lines are being monitored and tested every 24 hours. This is an improved service in relation to the previous 7 day arrangement.

2. The EMU system is Web based whereby all out of service alerts (known as 'pings') are forwarded directly to Apex Lifts 24/7- 365 days per year.
3. Planned preventative maintenance (PPM) visits have been increased from monthly to fortnightly. This has been achieved by varying the overall lifts maintenance contract at no additional cost. For example, the lesser used lifts receive a reduced number of PPM visits.
4. To further improve monitoring and breakdown reaction time, the implementation of an independent lift and escalator monitoring service is being considered. This would be undertaken by Charter Security who currently successfully manage the City's lift 'trapping service'. The notification of an out of service lift will thus potentially go direct to Charter Security who will immediately inform Apex Lifts.
5. Condition surveys for each lift have been completed and as a result critical spares lists have been created. The condition survey's identify future improvements and will be added to the forward maintenance plans that are being formulated in order that maintenance work and cost can be accurately forecast.

#### Cleaning

6. All lifts and escalators are cleaned by MITIE Cleaning and inspected on a weekly basis. This was previously carried out monthly. In addition, quarterly deep cleans have been scheduled to be undertaken by Mitie Cleaning. There has been a demonstrable improvement of cleanliness of the lifts.

#### **Millennium Inclinators**

##### Current Status and Improvements Undertaken

7. A dedicated electronic monitoring unit (EMU) and phone line has been installed and real time monitoring is now in place. This enables the lift engineer to monitor the operation of the inclinators and out of service notifications sent to Apex Lifts to ensure a quick response time is achieved.
8. A condition survey has been completed and as a result a critical spares list has been developed.
9. The Lift Performance reports included in the appendices demonstrate the general improvement of 'in service' time over the period September 2013 to January 2014.

##### Proposed Improvement Works

10. As proposed at the Planning and Transportation Committee meeting (26<sup>th</sup> November 2013), the department's technical team has carried out a technical survey of the Inclinators and discovered that a large number of breakdowns are due to water ingress.

11. As a result of the technical survey a number of improvements have been proposed. In summary the report proposes the following improvements;
  - a. Relocation of electrical controls within the lift pit area
  - b. Overhaul the access hatch to make it water tight
  - c. Introduce additional external surface water drainage
  - d. Overhaul internal drainage collection and disposal mechanism
12. The estimated financial implication for the above proposal is approximately £16,000 which will be funded by a combination of the bridges 50 year plan repairs and maintenance fund and local risk budgets.

## **Moorgate Escalator**

### **Overview**

13. Due to age (39 years), the general condition, poor performance and a lack of freely available spares, the 'down escalator' was moth-balled and used as a readily available source for spare parts to support and provide a reliable 'up service'. Works and options were detailed and subsequently approved by Planning and Transportation Committee ref: Report CS 387/12.
14. The works were undertaken during December 2012 at a cost of approximately £25,000 inclusive.
15. The constrained 'up service' originally was required for a minimum of 15-18 months pending the new escalator which is to be installed by the Crossrail project.

### **Crossrail and New Escalators Update**

16. Two new escalators by Crossrail have an estimated installation date extended from November 2014 to summer 2015. This constitutes a longer delay than originally conveyed by Crossrail.
17. The department's technical team has reviewed the Crossrail escalator specification and has proposed particular design and material changes. This is to ensure that escalators offer operational resilience and can be effectively and efficiently maintained by the City. The proposal is currently being considered by Crossrail.
18. At the time of writing this report, Crossrail has written to the City stating that they 'may need to cut off the power to the high walk and the escalator area' from the 17<sup>th</sup> March. Crossrail has been contacted with a request for more detail with regards to alternative arrangements.

### **Improvements Undertaken**

19. Due the age, condition and obsolete parts it is becoming increasingly difficult and challenging to rectify breakdown faults. However some improvements have been introduced;
20. A new specialist escalator sub-contractor has been employed by Apex Lifts which has resulted in an improved attendance time. Additionally, the planned preventative maintenance (PPM) has been increased to fortnightly visits (previously monthly).
21. The electronic monitoring unit (EMU) has been upgraded and is monitored each 24 hour period.

## **Conclusion**

22. As a result of the actions taken, the performance of the public lifts has improved. This is illustrated in the accompanying Lift/Escalator Performance reports (Appendices 2, 3 and 4).
23. As a result of the lift/escalator age and because of the volume of usage, breakdowns are inevitable. Additionally spare parts are difficult to find and require specialist supplier and/or manufacture. This results in longer than expected outages and repair lead-in times.
24. Public misuse of the lifts and/or escalators is experienced especially with the high volume of usage, which subsequently cause unforeseen outage periods.
25. The lifts, escalators and Millennium Inclinator operation are now monitored more effectively whereby any breakdown is immediately captured and relayed to Apex Lifts.
26. The improvements made and the options going forward will create additional resilience with regard to its operation and service. The improvement measures are being implemented by using local risk budgets and the 50 year bridges repairs and maintenance fund.
27. The improvements to date have been evidenced in the recent good performance and low rate of outage shown on the 'lift reports' included in appendices 2, 3 and 4.
28. Improvements will continue to be driven by your Officers.

## **Appendices**

- Appendix 1 – Action Plan
- Appendix 2 – Planning & Transportation Committee Lift Report  
21 September 2013 to 22 November 2013
- Appendix 3 - Planning & Transportation Committee Lift Report  
25 November 2013 to 09 January 2014

- Appendix 4 - Planning & Transportation Committee Lift Report  
10 January 2014 to 30 January 2014

**Background Papers:**

Reference within this report is made to previous Committee Reports;

Planning & Transportation Committee ref: Report CS 387/12

Planning & Transportation Committee ref: Report CS 431/13

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