

# BLACKPOOL TRAMWAY

Appendix 7(a)

## Tramway Asset Management Strategy

# AN OVERVIEW 2022



Blackpool Council



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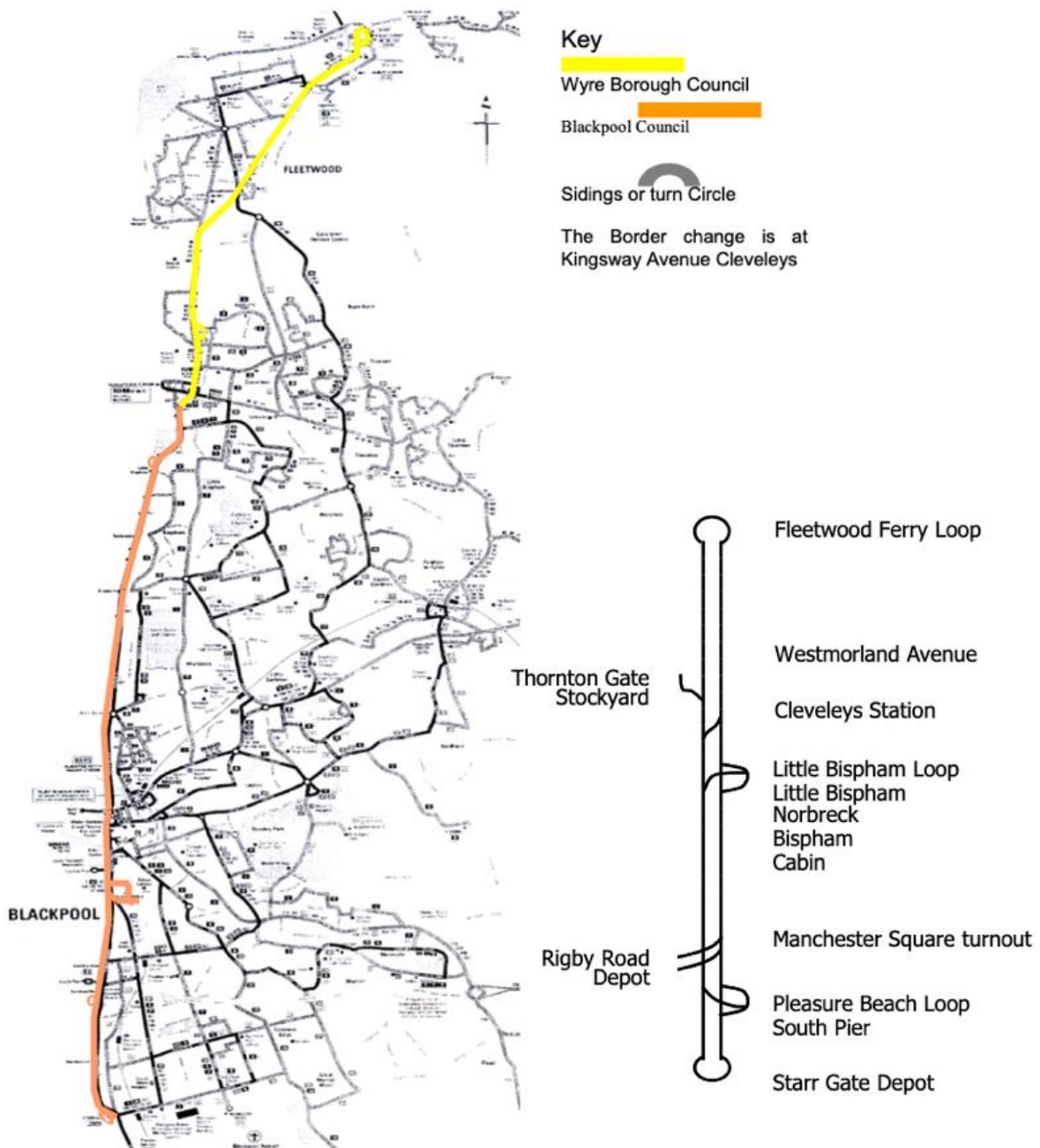
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# 01

## A Brief Description of the Tramway

Blackpool and Fleetwood Tramway runs along the Fylde coastline from Blackpool Starr Gate in the south to Fleetwood Ferry in the north and will soon include a branch to North Station. It is located within the boundaries of two local authorities, namely Blackpool Council and Wyre Council in Lancashire.



The Tramway is wholly owned by Blackpool Council and operated by Blackpool Transport Services. They work to ensure the continued safe delivery of a unique and iconic tram experience.

The network operates on a combined service pattern using the modern LRT fleet at varied intervals, supplemented by a B-Fleet and the Heritage Fleet during busier periods. This delivers a 5-minute service headway during periods of greatest passenger demand. It also features excellent accessibility features enabling it's use by all members of our community.



The Tramway is an iconic feature of the Fylde coastline and the heritage trams are a major tourist attraction which enables Blackpool to maintain its status as the UK's busiest seaside resort. In total the Tramway annually currently carries more than 5.5 million passengers. It also provides employment to approximately 230 people. This modernised light rail system provides accessible, reliable and affordable transport to local residents, school children, commuters, local businesses and visitors. It is integral to the economy and lives of the people of Blackpool enhancing social value.

The Tramway is differentiated from other transportation assets in many ways. These include:

- Safety of users of the Tramway. This is different from other transportation assets such as highways since, on the Tramway, the public have minimal input into the safe operation of the Tramway.
- The Tramway is a tourist attraction. People visit Blackpool with the sole purpose of traveling on the Heritage Fleet.
- Split management of the assets and the assigned maintenance responsibilities.
- Aggressive environmental conditions due to the Tramway proximity to the coastline. These include a high-water table, corrosive effects of the sea, abrasive effects of the sand and bleaching properties of the sun.

# 02

## Our Objectives

### **Strategic Objective 1**      **To manage and operate an accessible, reliable and sustainable Tramway Network**

We will address the needs for an accessible, reliable and sustainable network across a range of our maintenance and operational activities, including but not limited to:

- Assessing all ticketing, access and passenger safety facilities to ensure that they meet the needs of all users of the Tramway.
- Ensure that the Tramway operations and maintenance activities are integrated with other local modes of transport.
- Undertaking regular safety and condition inspections to ensure all assets continue to be operable and safe.
- Maintaining a robust schedule of preventative and routine maintenance with an undertaking to provide reactive and emergency maintenance to mitigate any risk to safety and reliability.
- Being aware of predicted environmental conditions and other factors that could disrupt the operation of the Tramway to ensure that the network remains resilient.

### **Strategic Objective 2**      **To optimise investment and funding outcomes for the Tramway network to mitigate deterioration**

We believe that the Tramway can operate within its means through good asset management practices and will not leave a financial legacy for the next generation. In order to optimise the required investment funding of the Tramway, we are committed to minimising the deterioration of the condition of Tramway assets or, where considered cost effective, to improving the condition of assets.

Building on the significant investment and improvement that Blackpool have made in the Tramway in the previous decade, the Tramway permanent way and fleet services teams will further expand the level of preventive maintenance works where appropriate, in order to ensure the life of critical assets is extended. This preventive approach will be delivered hand-in-hand with ongoing capital renewal and improvement works.

Subject to funding availability, the Tramways teams will ensure that we maximise value for money so that the condition of the Tramway is 'fit for purpose' and is optimised.

**Strategic Objective 3      To maintain the Tramway so it continues to be safe to operate and use**

It is imperative that the Tramway must be safe. Safety considerations will therefore pervade every aspect of the planning and implementation of design, maintenance and operation of the Tramway. This will manifest itself in many ways including the following:

- Conducting rigorous safety reviews in the design and maintenance planning processes
- Providing safety protocols and materials that are easily accessible when required and easy to understand and implement
- Training all staff in the importance of safety
- Ensuring we undertake safety repairs promptly and 'fixing it first time' where practicable
- Promote safety on the network amongst the travelling public, our workers and supply chain partners

**Strategic Objective 4      To ensure we inform and communicate with key stakeholders to optimise the Tramway's social and economic value**

We will provide communication systems that:

- Ensures that the Tramway is responsive to the views and needs of residents, schools, businesses, commuters, visitors and other stakeholders.
- Informs Tramway users of the services offered and any disruption to those services and encourage feedback from those users
- Proactively uses all feedback from tramway users and surveys to promote the continuous improvement of the Tramway
- Identifies the need to interact with highways for planned road works so that other modes of transport i.e. links to bus services and national rail services are maintained.

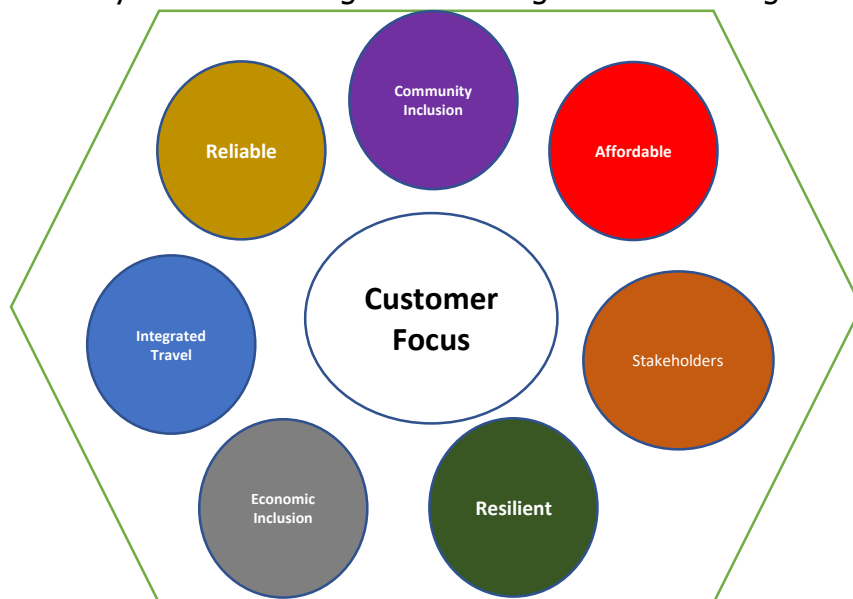


# 03

## Safety First

Safety is the first and foremost consideration in the Operation and Maintenance of the Tramway. To ensure effective safety and risk management, we:

- Align with corporate policy on risk and safety
- Ensure key or critical Tramway-related safety issues and risks are recorded and managed / mitigated as needed
- Establish clear roles and responsibilities for safety and risk management within the respective Tramways areas
- Take safety and risk management considerations into account during management decision making processes
- Reinforce the importance of effective management of safety and risk through training and provision of opportunities for shared learning
- Monitor our safety and risk management arrangements on a regular basis



The modern fleet of trams, B-fleet and Heritage fleet are operated and maintained to the highest standards. It is also planned to fit the trams with state-of-the-art obstacle detection systems to add another layer of safety to the tram environment.

Our record on health and safety has been excellent. We undertake regular safety inspections to ensure the Tramway is safe to operate and use. All aspects of Tramway management and maintenance are subject to external audit by the governments Office of Road and Rail (ORR) and their various offices with a focus on safety. Tragically there was a fatality at the Fleetwood Road crossing in 2021 for which investigations are still ongoing.

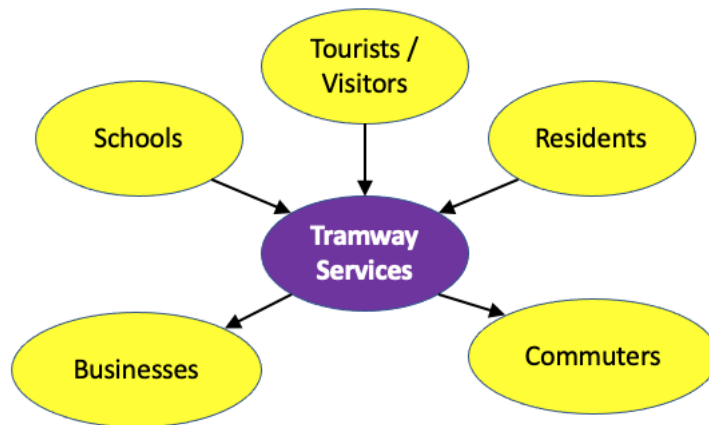
The management of safety of the Tramway is fully described within our Safety Management System documents.

# 04

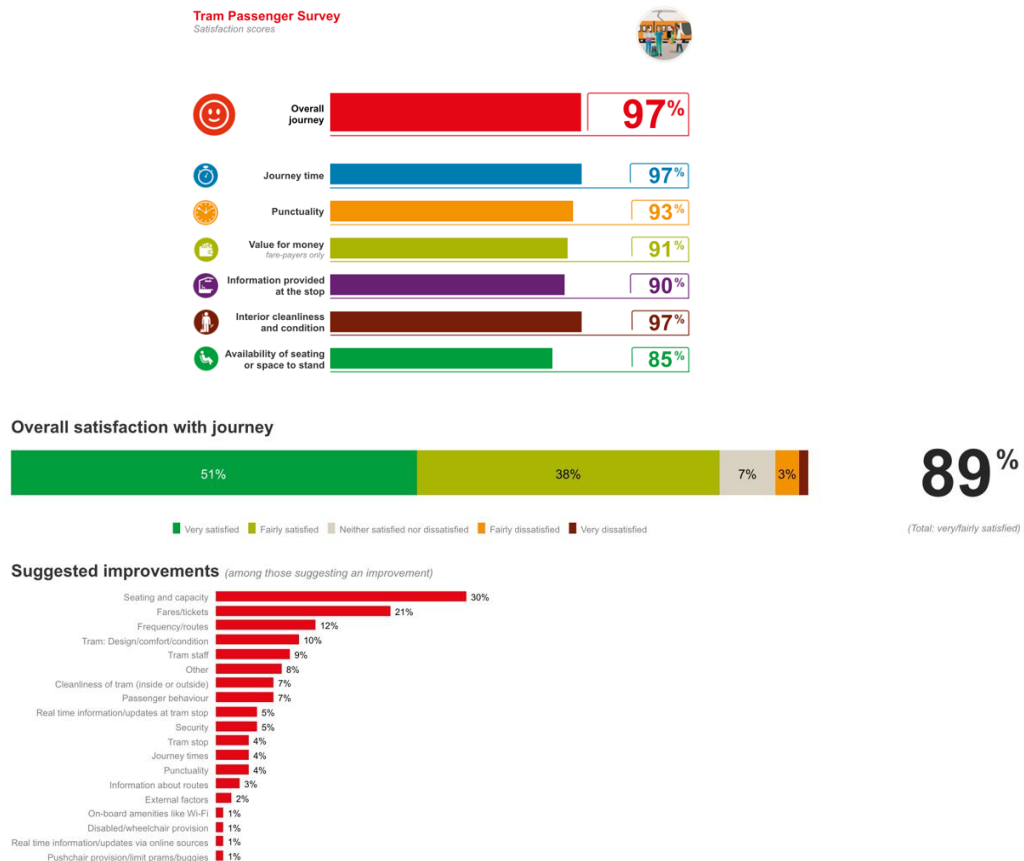
## Our Customers

The Tramway is a key element of the integrated transport infrastructure within Blackpool and the wider Fylde coast carrying 5.5million passengers a year, made even more accessible by the extension to North Station to be opened in 2023.

The Tramway the serves many sections of the community:



We aim to be recognised as a service that listens and reacts accordingly to the views of our customers and earn their trust and build relationships with them. Here are what our customers think of our services:





# 05

## Our Assets



18 No. modern LRT trams  
9 No. B-fleet trams  
16 No. Heritage Trams

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Starr Gate Depot  
Rigby Road Depot



18.2 km of tramway track and Overhead  
Line Equipment (OLE)

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82 switches and points



74 No. LRT tram stops (37 in each direction)  
12 No. Heritage tram stops

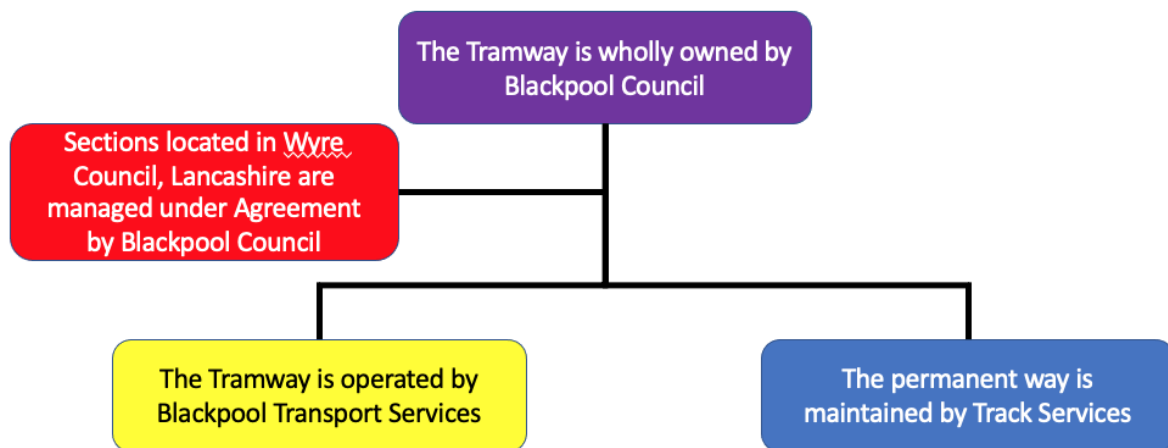
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240 staff dedicated to the tramway



# 06

## How we Operate and Maintain the Tramway



### **BTS Responsibilities**

Operation of the trams  
Timetable schedule  
Starr Gate & Rigby Road Depots  
Routine maintenance of the Fleet (LRT, B & Heritage) OLE, SCADA, Signal, Traction Power & TDS  
Planning and agreement with the Council capital works associated with BTS managed assets (all funded by the Council)

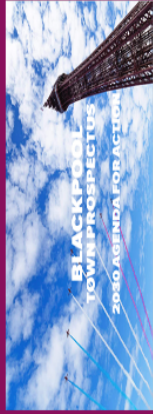
### **Track Services Responsibilities**

Routine and Capital Maintenance for:

- Permanent Way - Plain Line (including sleepers and ballast)
- Permanent Way – Points, switches and crossings
- Platforms and associated furniture
- Drainage systems
- Signs & fencing
- Overhead Line support poles

- 
1. Lancashire County Council make an annual financial contribution to the O&M of the Tramway in the order of 37% of the ongoing costs.
  2. Routine maintenance is defined as preventative maintenance associated with emergency, reactive or minor cyclic works planned on an annual basis. Capital maintenance is defined as major replacement or renewal works planned on a lifecycle based forward programme of works but occasionally unplanned.
  3. BTS is funded through Tramway ticket sales and an annual contribution in the order of £312,000 from Blackpool Council for maintenance of the OLE.
  4. Track Services is a division of the Department of Highways and Traffic Management within the Community and Environmental Services Directorate of Blackpool Council

The **Tramway Asset Management Framework** diagram on the next page shows the hierarchy of the various aspects of maintenance and how these relate to each other.



# Blackpool Council

## Corporate Vision and Plans



### Asset Management Enablers

- Governance
- Skills & Competencies
- Roles & Responsibilities
- Training
- Asset Information Strategy & Plan
- AM Systems & Data Modelling
- CRM
- Stakeholder Surveys
- Multimodal Transport works plan
- Budget Control
- Asset Valuation
- Investment Strategies
- Collaborative working
- Service Level Agreements
- Procurement & Contracts
- Resource Management
- Management Information
- Risk Registers
- Safety Protocols

### Strategic Asset Management Planning

**Tramway Asset Management Strategy**  
Policy Aims & Principles and Strategic Objectives

### Tactical Asset Management Planning

**Tramway Asset Management Plan**

- Data Management
- Communications Plan
- Maintenance Methods
- Safety & Risk Management
- Resource Management

**Lifecycle Modelling**

Data Analysis → Predictive Modelling → Treatments / Options → Forward Works Planning

### Operational Works Planning and Delivery

- Cyclic, Reactive, & Emergency Maintenance
- Capital Maintenance
- Improvement & Expansion Works

### Monitoring & Evaluation

- Performance Management Levels of Service, KPIs
- Stakeholder Feedback

### National Policy & Guidance / External Influence

- ORR Regulations & Light Rail Codes of Practice
- Complimentary Regulations & Guides e.g. CDM Regulations
- Political Commitments & Partnerships
- Financial Reporting Requirements (UK Accounting Code)
- Local Authority Funding Allocations
- ISO55000:2014  
ISO44001:2017
- UK & International Asset Management Guidance

# 07

## Our Programmes of Work

There is an ongoing programme of routine work required to allow the Tramway to operate safely on a day-to-day basis and to mitigate against deterioration.

Track Services routine works, funded by the Council at a cost of approximately £450k per annum. include:

- Track Inspection and Geometric Surveys
- Rails & ancillary component repair due to wear, fracture and breakage
- Sleeper alignment, repair or replacement
- General rail welding & grinding
- Ballast Tamping
- Solum failure repairs
- Fish Plate lubrication
- Concrete Nibs (section concrete road/rail)
- Switches & Crossing (including blades) repairs
- Points (motorised and manual) cleaning and greasing
- Signals cleaning
- OLE pole cleaning, painting and replacement
- Repair / replacement fences
- Gates and shelters
- Litter clearance
- Weed Spraying
- Sand and gravel maintenance
- Groove cleaning.
- Platform datum plates checks
- Platform furniture cleaning, painting and repairs
- Street paved track repairs
- Cleaning and jetting of Tramway drains

BTS routine works, funded by a contribution of approximately £300k from the Council for OLE works and through funds from ticket sales, include:

- Inspections
- Maintenance of the Overhead Line and associated Equipment (OLE)
- Maintenance of the SCADA System
- Sub stations and associated traction (power) maintenance
- Maintenance of the Signalling Systems
- Maintenance of the rolling stock (including wheel shafing)
- Tram Depots (Rigby Road and Starr Gate) maintenance and repair works

The Council has a well-planned programme of capital maintenance designed to extend the usable life of our infrastructure assets. Typically the programme will be repeated every five years and includes:

- Corrugation
- Tamping
- Sub-arch Welding
- Turn-out Replacement
- Rail Replacement

Planned Mtce Funding	2019/20	2020/21	2021/22	2022/23	2024/25	2025/26	2026/27	Totals	
Corrugation	£550,000					£550,000		£1,100,000	5 Year Programme
Tamping		£80,000	£80,000	£80,000	£80,000	£80,000		£400,000	
Sub Arch Welding		£70,000	£70,000	£70,000	£70,000	£70,000		£350,000	5 Year Programme
Turn Out replacement		£20,000	£20,000	£20,000	£20,000	£20,000		£100,000	5 Year Programme
Rail Replacement		£85,000	£85,000	£85,000	£85,000	£85,000	£85,000	£510,000	6 year programme
<b>Preventative Total</b>	<b>£550,000</b>	<b>£255,000</b>	<b>£255,000</b>	<b>£255,000</b>	<b>£255,000</b>	<b>£805,000</b>	<b>£85,000</b>	<b>£2,460,000</b>	

Since all Tramway assets are owned by the Council, the Council is responsible for the funding of capital works managed by BTS. The scope and timing of capital works is therefore subject to agreement between BTS and the Council. Since the assets maintained by BTS are only approximately 10 years old (i.e. installed in 2012), no major maintenance on the system has yet been undertaken and none has been planned.

Lancashire County Council (LCC) contributes to the funding of works on the Tramway on the basis of a formal agreement that has been in place since 2013. The agreement allocates funds based on quarterly expenditure split between Blackpool Council and LCC on the basis of the length of the permanent way located within each authority. This split currently stands as 63% for BC and 37% for LCC.

The iconic Heritage Fleet is subject to unique funding arrangements. The maintenance work is undertaken by volunteers who also raise the funds necessary for the maintenance from the public and from private donors.

# 08

## What we plan to do

There are a number of issues that we need to take forward in the near future. These include:

1. Implementing the recommendations made as a result of the investigations into the fatality at Fleetwood Road
2. Completing, issuing and implementing the Tramway Asset Management Strategy (TAMS)
3. Completing, issuing and implementing the Tramway Asset Management Plan (TAMP)
4. Completing all items within the TAMP action plan
5. Reviewing, updating and signing the Tramway Operating and Maintenance Agreement
6. Reviewing, updating and signing the agreement between Blackpool Council and Lancashire County Council
7. Fully establishing and empowering the recently established Tramway Infrastructure Improvement Committee
8. Receive and start operating trams on the North Station extension
9. Fulfilling BTS values and delivering on their key messages
10. Delivering our routine and capital works programmes