# Green Transport Recovery Plan
# Monitoring & Evaluation Technical Note

## 1 Introduction

As Southampton emerges from the Covid-19 lockdown Southampton City Council has produced its Green Transport Recovery Plan (GTRP). This is the Council's response to the Government's recommendations for encouraging active travel and supporting social distancing. The GTRP consists of 21 individual cycling, walking, public transport, and electric vehicle schemes being implemented during 2020.

The Council is keen to support and maintain the positive health and environmental benefits that residents have experienced over the last few months and to support the economic recovery of the city. There have been significant increases in levels of active travel and an improvement in local air quality. As the restrictions are gradually eased the Council is implementing the schemes as a combination of temporary and permanent layout changes. These will support the return to a new norm for getting around actively, safely and for the economic recovery of Southampton.

The schemes set out in the GTRP, are detailed in Appendix A, are centred around social distancing, and enabling active travel. The first tranche of schemes was implemented in May-June 2020 with further schemes to come later in the Summer.

The temporary, or trial, schemes enable the Council to monitor and evaluate how the scheme is being used and its wider impact on other modes of travel and the network. The powers that the Council have under the Traffic Management Act 2004 mean that Experimental Traffic Regulation Orders (ETRO) can be used. These have a different consultation process with people able to comment on them during the trial, at certain points there will be decisions made based on the evidence and responses to date. These will enable the Council to make a decision on the schemes' future and their value for money. This will be over a 1-6 month period but schemes are kept under weekly review.

This technical note sets out the monitoring and evaluation approach – setting out the criteria, parameters and process that will be used to monitor the impacts of the GTRP schemes. Also, how this regular monitoring will help inform decisions on the scheme's future. The data is combined with professional officer judgment, feedback from public, network management and Elected Members. Recommendations are then made to the Head of Service and Executive Director for a decision, in consultation with the Cabinet Member.

The evaluation will also feed into any national monitoring and evaluation framework set up by the Department for Transport. This is to demonstrate the outcomes of the schemes are in line with national and local objectives and represent good value for money.

The schemes delivered as part of the GTRP are funded through a combination of DfT grants, including Transforming Cities, Emergency Active Travel Fund, Local Transport Plan, developer contributions and other grants funding. These funding mechanisms include the requirement for schemes to be monitored and evaluated appropriately in accordance with the funding agreements.

The GTRP was developed following the publication of guidance issued by the Government requesting that Local Authorities accelerate the delivery of pedestrian and cycle schemes in response to the pandemic. This included updated traffic guidance enabling Local Authorities to deliver schemes quickly, through an Experimental (ETRO) or Temporary Traffic

Regulation Order (TTRO), whilst undertaking consultation in parallel. This process enables Local Authorities to trial, and to make subsequent alterations or minor adjustments to schemes for a period of 1-6 months, up to a maximum of 18 months.

## 2 Monitoring Approach

Schemes within the GTRP will be monitored against a primary set of outputs that will demonstrate their impact and inform decision making.  This is complemented by a secondary set that is more scheme specific as the criteria may be different depending on each scheme. The criteria for schemes are set out in Appendix A.

Several of the schemes are advanced works for Southampton's Transforming Cities Fund programme, and the monitoring and evaluation for these will form part of the baseline for TCF Monitoring & Evaluation.

A baseline of data, where available, is collected pre-scheme as well as using pre-Covid data from early 2020 or historic data from an equivalent time in previous three years.  Data is held by the Council, national datasets or data from public transport or other operators (EV, car parks etc).

The primary criteria that will be considered to monitor temporary schemes throughout their lifetime, from pre-lockdown to post-scheme implementation, are set out below.

The primary monitoring criteria are:

- Capacity - for a roadspace reallocation scheme this is the theoretical capacity of a lane or road, measured using the number of vehicles per lane per hour passing a given point in the AM, PM, and inter-peak periods. For a cycle parking scheme this is the capacity of the cycle parking;
- Journey Times - time taken to travel between two points for all vehicles – cars, cycles and buses;
- Usage – the number of people walking or cycling, the number of cycles parked, electric vehicle charges;
- Levels of response – representations made to official email address for the ETRO

Secondary criteria are more scheme specific and will be tailored depending on the scheme. These include:

- Parking – the level of displaced parking or parking on-street
- Speeds – average speeds along a road
- Air Quality – changes in NOx or NO² levels

Additional monitoring criteria will also be considered, including value for money.

The process for data collection and milestones (in orange) for data are set out below.

Pre-Scheme Data → Scheme Implemented → Trial Scheme Data → Scheme Adjustment → Scheme Decision → Post-Scheme Data

## 3 Data Sources

The criteria will be monitored using a range of existing equipment and surveys, including:

| | Type | Frequency | Method | Source |
|---|---|---|---|---|
| Capacity | Traffic Flows | Daily | Automatic Traffic Counters | SCC |

| | Traffic Flows | Weekly | Manual Traffic Counts | SCC |
|---|---|---|---|---|
| | Cycle Parking | Weekly | Parking Beat Surveys | SCC |
| Journey Times | Journey Times | Daily | Bluetooth | SCC |
| | Bus Journey Times | Daily | Real Time Information Systems | SCC |
| | Bus Journey Times | Daily | Bus Operator Ticket Machines | Bus Operators |
| Usage | Cycle Flows | Daily | Automatic Cycle Counters | SCC |
| | Cycle Flows | Daily | Manual Cycle Counts (either 12hr or 1hr spot counts) | SCC |
| | Automatic Footfall Monitors | Daily | Cameras | BID |
| | Electric Vehicle Charging | Daily | EV Charging points | SCC |
| | Cycle Parking | Weekly | Parking Beat Surveys | SCC |
| Other | Parking | Weekly | Parking Beat Surveys, Parking Enforcement | SCC |
| | Speeds | Daily | Automatic Traffic Counters | SCC |
| | Air Quality | Monthly | Diffusion Tubes, ARUN monitoring stations | SCC |
| | Bus Usage | Monthly | Patronage | Bus Operators |

*Table 1 – Data Sources*

Alongside the main quantitative data, other sources of qualitative information will be considered when evaluating scheme benefits, including, but not limited to:

- Email and written correspondence received by social media, Councillors and BBLP;
- Residents e-Survey;
- The People's Panel;
- National campaigns, such as Sustrans Space to Move Campaign and Widen My Path; and
- Platforms such as Commonplace.

This will enable SCC to feed into any national monitoring and evaluation carried out by the DfT.

## 4 Methodology

The Council has a network of Automatic Traffic and Cycle Counters, shown in Appendix B and C, recording a range of information, including traffic/cycle volume, traffic split, by lane, and speed of vehicles. This enables the Council to monitor the impact of the GTRP measures. Journey times are from data collected by SCC Bluetooth sensors (as well as supplementary sources such as Google and See.Sense) that will enable us to calculate average journey times between two given points in the network.

The Southampton and Hampshire Real Time Information (RTI) Systems enables the calculation of bus journey times against pre-published timetable information and actual departure times. The outputs of the SCC RTI System can be further ratified by comparing them against those recorded in the system maintained by HCC on behalf of local bus operators. This information is reported to the DfT annually as part of the national bus punctuality dataset, so a baseline for Southampton already exists, however specific route calculations will be undertaken for individual schemes delivered as part of the GTRP.

Whilst temporary Automatic Traffic Counters could help complement the permanent counters, there is a lag between the counter being removed from site and the information being given to SCC. There are also issues with the accuracy of using ATCs to record cycle movements. For this reason, roadside counts, undertaken by enumerators, offer us a more reliable dataset, which can be accessed quicker and enable us to make swift recommendations in response to changing travel patterns. SCC has also expressed an interest in using temporary cycle counters, currently being investigated by HCC, which have been specifically designed to record the number of people cycling.

Manual parking surveys undertaken by SCC will be used to monitor changes in where people chose to park their vehicles when parking has been removed or relocated.

Our four Air Quality Monitoring Stations and network of over 60 diffusion tubes will allow us to monitor changes in air quality. It is vital that this information is not considered in isolation and should be considered alongside other data, including traffic flows and weather conditions.

Other sources of information that will enable us to monitor capacity and the number of people walking and cycling throughout the lifetime of individual schemes, include manual surveys (such as traffic flows, traffic mix and turning counts) organised by SCC or national datasets collected on behalf of the DfT.

The responses to the TROs are reviewed by the Traffic Management Team at BBLP and total number of responses received are categorised as for, against or neutral, and an indication of the topic areas are provided.

## 5 Parameters

The below sets out the key parameters that will be used to determine the impact of a scheme and as part of any review of a temporary scheme.  This is to provide a balanced assessment to help inform decisions on when they should be altered or removed and performance against the GTRP objectives.

These parameters will be used to inform weekly reviews of the GTRP schemes and to make recommendations for the scheme.  A RAG status is attached, and this will help to inform the decisions about their removal or alteration, or making permanent, which will include a further consultation process.  This is set out in Table 2.

| Criteria | Metric | Green | Amber | Red |
|---|---|---|---|---|
| Primary Parameter | | | | |
| Capacity | Traffic Flows - 2-way flows daily traffic | Under baseline | Approaching baseline (within 10%) | Within >/= 5% of baseline |
| | Traffic Capacity - Peak (AM & PM) period per lane | Under lane capacity | Approaching lane capacity (within 10%) | At or above lane capacity |
| | Cycle Parking | More than 15% usage | Amber up to 15% usage | Not being used |
| Journey Times | Journey Times - Peak (AM &PM) period average time taken between 2 points | Under baseline | Approaching baseline (within 10%) | Within 5% of baseline |

| | | | | |
|---|---|---|---|---|
| | Bus Journey Times - Peak (Am & PM) period average time taken between 2 points | Under baseline | Approaching baseline (within 10%) | Within 5% of baseline |
| Usage | Cycling - Cycle Flows | Increase in cycling numbers on previous week/ survey | Decrease in cycling numbers on previous week/survey | No cycles observed |
| | Walking – Pedestrian flows/footfall | Increase in walking numbers on previous week/ survey | Decrease in walking numbers on previous week/survey | No walking observed |
| | Electric Vehicle Charging Points | Increase in EV charging numbers on previous week/ survey | Decrease in EV charging numbers on previous week/survey | No EV charging observed |
| Representations | Official responses[1] received | Representations against <85% of total | Representations against <95% of total | Representations against >95% of total |
| Secondary Parameter (Scheme Specific) | | | | |
| Parking | Parked vehicles against capacity on side streets | Below 95% occupancy with parking available | Approaching capacity - >95% full on observed occasions for 1 week | Approaching capacity (>95%) for more than 1 week and/or a safety issue is observed |
| Speeds | Average vehicles speeds | Under baseline | Approaching baseline (within 10%) | Within 5% of baseline |
| Air Quality | NOx/NO² levels | Under baseline | Approaching baseline (within 10%) | Within 5% of baseline |

**Table 2 – Scheme Criteria and Parameters**

Alongside these metrics, professional judgement, responses received and any correspondence from the Police regarding safety will be used. If there are any safety related incidents on a scheme, these will automatically trigger a scheme review based on known information from BBLP or the Police.

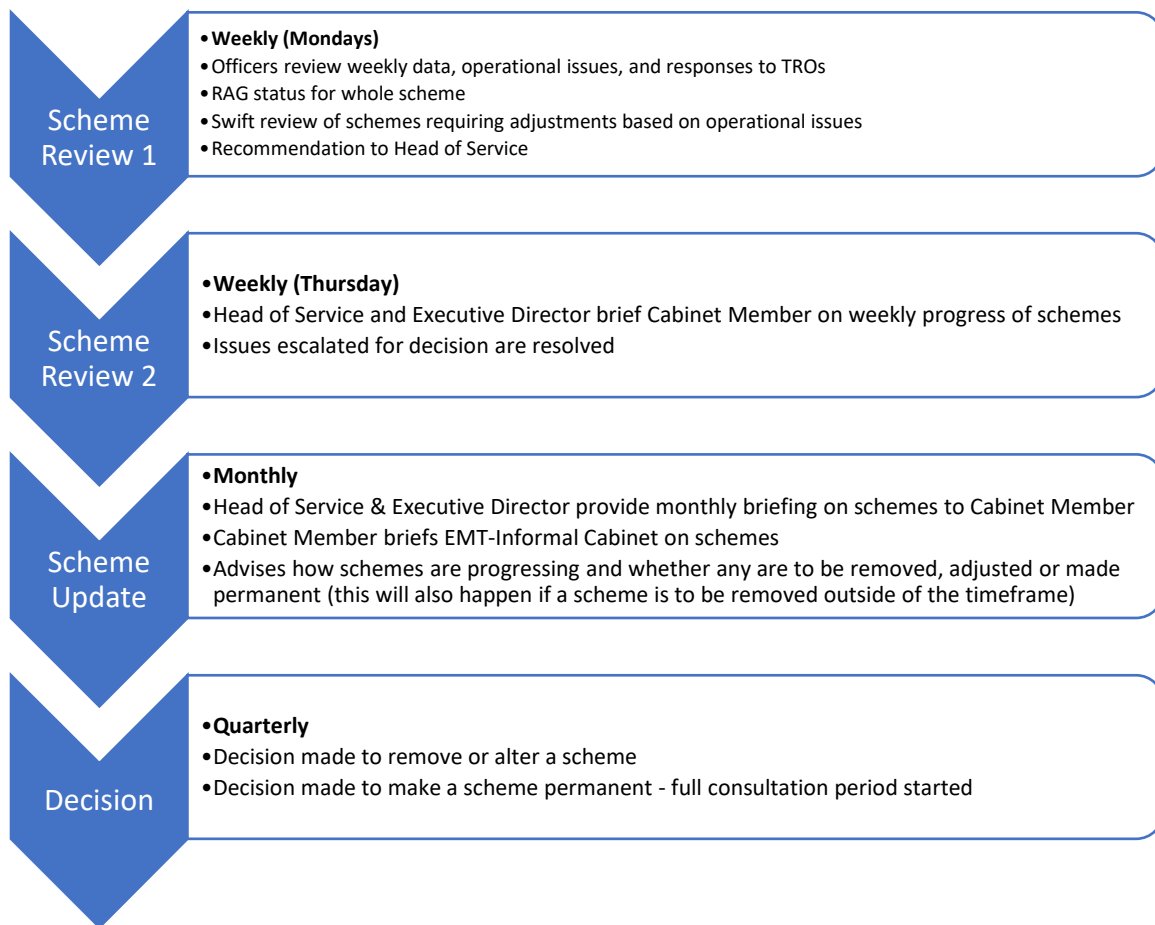Pre-Covid Baseline levels are from the period between 9th February and 9th March 2020. Other pre-Covid baselines may be used as appropriate depending on data.

# 6 Scheme Decision Making

As many of the schemes in the GTRP are initially temporary, a decision-making process is set out using weekly data for the primary criteria, augmented with secondary.

---

[1] Responses received to traffic.orders.legal@southampton.gov.uk

The process for scheme review is set out below:

**Scheme Review 1**
- **Weekly (Mondays)**
- Officers review weekly data, operational issues, and responses to TROs
- RAG status for whole scheme
- Swift review of schemes requiring adjustments based on operational issues
- Recommendation to Head of Service

**Scheme Review 2**
- **Weekly (Thursday)**
- Head of Service and Executive Director brief Cabinet Member on weekly progress of schemes
- Issues escalated for decision are resolved

**Scheme Update**
- **Monthly**
- Head of Service & Executive Director provide monthly briefing on schemes to Cabinet Member
- Cabinet Member briefs EMT-Informal Cabinet on schemes
- Advises how schemes are progressing and whether any are to be removed, adjusted or made permanent (this will also happen if a scheme is to be removed outside of the timeframe)

**Decision**
- **Quarterly**
- Decision made to remove or alter a scheme
- Decision made to make a scheme permanent - full consultation period started

Each individual parameter has a RAG status assigned and then an overall RAG status is attached to each scheme as follows:

- Green – no operational issues, data has not hit the parameter criteria in table 2,
- Amber – some operational issues require resolution, data is close to the parameter criteria in table 2 but not yet at or breaching them, a growing number of objections to the TRO, and
- Red – major operational issues that cannot be resolved, data has reached or above the parameter criteria in table 2, reasoned objections are high.

If a scheme is identified as Amber, operational changes can be made to resolve any issues with increased site observations. Where a scheme is identified as Red – scheme is escalated to Head of Service and Executive Director with recommendations to be made in consultation with the Cabinet Member.

At the quarterly decision points, if a scheme is to be made permanent there will be further public consultation as part of the formal TRO process set out in legislation.

.

## Appendix A – Green Transport Recovery Plan Schemes

| Scheme | Measure | | | | | | |
|---|---|---|---|---|---|---|---|
| | Vehicle Flows | Vehicle Journey Times | Bus Journey Times | Speed | Parking | Active Travel Use | Air Quality |
| **Supporting Social Distancing** | | | | | | | |
| Pedestrian Crossings | X | X | X | | | X | |
| City Centre Social Distancing – Bus Stops | | | | | | X | |
| City Centre Social Distancing - Retail | | | | | | X | |
| City Centre Parklets | | | | | | X | |
| School Streets | | | | | X | X | X |
| Bus Priority | | | X | | | X | |
| **Supporting Active Travel** | | | | | | | |
| Cycle Parking Hubs | | | | | X | X | |
| District Centre Cycle Accessibility | | | | | | | |
| SCN5 The Avenue-Bassett Avenue | X | X | X | X | | X | X |
| SCN4 Hill Lane | X | X | | X | X | X | |
| SCN4 Access to Southampton General | X | X | | X | X | X | |
| SCN6 Portswood Road | X | X | X | X | X | X | |
| City Centre Access | X | X | X | X | X | X | X |
| Filtered Permeability | | X | | X | X | X | |
| SCN6 St Mary's Road | X | | X | X | X | X | |
| SCN3 Bitterne Road West | X | X | X | X | | X | X |
| SCN8 Winchester Road | X | X | X | X | X | X | X |
| Active Travel Zones | X | X | X | X | X | X | X |
| Millbrook Road West Bus Lanes | X | X | X | X | | X | X |

**Appendix B - Location Plan of Automatic Traffic Counter Sites**

Location of Automatic Traffic Counter Sites redacted

**Appendix C - Location Plan of Automatic Cycle Counter Sites**

Location of Automatic Cycle Counter Sites redacted

**Appendix D - Location Plan of Bluetooth Sensors**

Location of Bluetooth Sensor Sites redacted