I am pleased to introduce TII’s Public Transport Projects and Programmes Active List.

Section 11 (1)(a) of the Transport (Railway Infrastructure) Act 2001 sets out one function of TII as follows:

“to secure the provision of, or to provide, such light railway and metro railway infrastructure as may be determined from time to time by the Minister or, in the case of such railway infrastructure within its functional area, by the National Transport Authority”.

The arrangements, as set out in the Public Spending Code apply to TII. Under those arrangements TII undertakes the role of Sponsoring Agency for light rail and metro public investment projects, with the National Transport Authority (NTA) undertaking the role of Approving Authority.

The light rail and metro projects and programmes outlined in this document are funded by Government through the NTA and are progressed through their lifecycle as approved by the NTA. I would like to take this opportunity to acknowledge the supportive and collaborative working relationship that exists between TII and the NTA in relation to these public investments in transformative transport infrastructure.

The Active List document provides a single page of information for each projects, outlining project details, the timeline for delivery and the benefits to be achieved on project completion. For some projects the timeline is prescribed by the National Development Plan 2018-2027. For those projects a second timeline is provided to indicate the earliest possible delivery.

I hope that this document will provide useful and up-to-date information in relation to public transport projects that TII is developing and delivering in accordance with Government policy.
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Project Details  (Note: All costs exclude VAT)
Projects at Close Out
GREEN LINE INFRASTRUCTURE UPGRADE (GLIU)

Timeline

- 2015: Project Initiation
- 2018: Substantially Complete
- 2020: Project Close Out

Benefits

- Reduction in crowding
- Increased capacity
- Increased service frequency
- Increased service reliability
- Facilitates future capacity enhancement
- Facilitate adoption of 55m trams
- Upgrade to stops and power infrastructure on existing green line
- Increase length of platforms and increase power rating of substations
- Cater for longer trams at higher frequencies

Details

- 12 Stops
- 3 Substations
- €13M Budget

12 Stops
3 Substations
€13M Budget

Benefits
- Reduction in crowding
- Increased capacity
- Increased service frequency
- Increased service reliability
- Facilitates future capacity enhancement
- Facilitate adoption of 55m trams
- Upgrade to stops and power infrastructure on existing green line
- Increase length of platforms and increase power rating of substations
- Cater for longer trams at higher frequencies

2015
Project Initiation

2018
Substantially Complete

2020
Project Close Out

Details

12 Stops
3 Substations
€13M Budget
GREEN LINE CAPACITY ENHANCEMENT (GLCE)

Timeline

- **2016**: Project Initiation
- **2021**: Substantially Complete
- **2022**: Project Close Out

**Benefits**

- 40% overall increase in service capacity
- Increase of 3,000 passengers per direction per hour (pdph)
- Future proof line capacity into 2030’s
- Purchase of 8 new trams
- Increase length of the existing fleet (26 trams) to 55m long
- Increased tram capacity
- Increased service frequency

**Details**

- 8 New Trams
- 26 Trams Extended
- €87M Budget
  - Including Sandyford Depot Extension

**8 New Trams**

**Extended**

**€87M Budget**

**Sandyford**

**8004**
SANDYFORD DEPOT EXTENSION

Details

Depot modifications in a live 24hr working site

Timeline

2016
Project Initiation

2019
Substantially Complete

2020
Project Close Out

Benefits

- Facilitates overall capacity enhancement project
- Improved operational effectiveness
- Enables maintenance of new longer trams
- Extend depot building to cater for longer trams

- Additional tram stabling
- Modify & upgrade depot signalling system
- Upgrade admin facilities
- Regularise compliance issues with new building regulations

Budget

€15M
Projects at / or Progressing to Construction
NETWORK ENHANCEMENTS (PTNE)

Enhancements to:
- Sustainability,
- Safety,
- Reliability,
- Maintainability,
- Resilience and
- Performance of existing assets

Umbrella programme for network enhancement initiatives
- Sustainability & energy saving measures
  - Solar arrays in depots,
  - Energy efficient depot retrofits,
  - Tram energy use modifications etc
- Red Cow redevelopment & transport interchange
- Carrickmines park & ride
- Resilience project – backup central control room
- Operational improvements – additional turnbacks
RED COW REDEVELOPMENT & TRANSPORT HUB

- Provide new transport hub
- Facilitate Bus Connects and other transport improvements
- Public realm improvement opportunities
- Depot improvements
- Two new maintenance lanes
- Increased operational efficiencies
- Additional office accommodation
- Removal of existing temporary facilities

Incorporating energy saving initiatives such as solar array and depot retrofit
Regularise compliance issues with new building regulations

€25-50M Budget

**Timeline**

- 2021 Planning Submission
- TBC Commence Construction
- +3 years Completion

**Details**

- Increased Maintenance Facilities
- Transport Hub
- Includes sustainable initiatives such as Solar Array
- Additional Office Space

**Network Enhancements**

- RED COW REDEVELOPMENT & TRANSPORT HUB

**Benefits**

- Incorporating energy saving initiatives such as solar array and depot retrofit
- Regularise compliance issues with new building regulations
Increased car charging and cycle parking facilities
Improved transport interchange arrangements
Facilitate Bus Connects and other transport improvements
Public realm improvement opportunities
Replaces temporary parking located on private land to be developed

Ensures continuity of service
Complies with Strategic Development Zone (SDZ)
Facilitates planned residential development
LUAS ENERGY EFFICIENCY PROGRAMME

Multi-annual Programme

- Increase energy efficiency of Luas rolling stock & infrastructure
- Solar arrays on depots
- Depot retro-fit programme
- Tram Energy Monitoring System (TEMS)
- Identify and enable tram energy usage improvements

Solar Arrays

Depot Retrofits

Energy Monitoring Systems

€tbc Budget
Projects at Planning & Design
METROLINK

- High-frequency
- High-capacity system
- Caters for 20,000 passengers per direction per hour
- Up to 50 million passengers per annum
- Low journey time 25 mins Swords to City Centre
- Services Dublin Airport
- Fully integrated with bus, light rail, DART and Irish Rail
- 3,000 space park & ride
- Active travel improvements
- Low emissions transport system
- Supports economic development and compact growth
- Regeneration opportunities

Detailed benefits include:

- 16 Stations
- 19 km Route Length
- €TBC Budget

Timeline:
- 2020: Preliminary Design (Current Stage)
- 2021: Planning Submission (Next Stage)
- TBC +8-10 yrs: Passenger Operation
CORK LRT

2020
Preliminary Design
Current Stage

TBC 2027+
Planning Submission
Next Stage

2024
Planning Submission
Next Stage

2031
Passenger Operation

NDP

25
Stops

17 km
Route Length

€1 – 3Bn
Budget

Efficient, fast, reliable & high capacity system

Initially as a high quality bus service

Scalable to Light Rail System

Serves all major destinations within corridor

Interchange with Irish Rail at Kent Station

Park & ride on N22

Relieve congestion on existing routes

Support planned expansion of key facilities at UCC, Cork Institute of Technology & Cork University Hospital

Enables future development

Enables regeneration

Public realm enhancement opportunities

Reduce reliance on cars

Increased active travel options

Timeline

Benefits

Details
LUAS FINGLAS

Details

- 4 Stops
- 4 km Route Length
- €250-1Bn Budget

Timeline

- 2020 Commence Preliminary Design
- TBC 2027+ Planning Submission
- TBC +5 yrs Passenger Operation
- 2020 Commence Preliminary Design
- 2023 Planning Submission
- 2028 Passenger Operation

Benefits

- Short journey time to city centre
- Optimises capacity on network
- Technological University Dublin Link
- Park & ride
- Address public transport deficit
- Rail & bus interchange
- Radial connectivity
- Grass track & cycle path
- Enables future development
- Enables regeneration
- Public realm enhancement opportunity
- Reduce reliance on cars

Map of Luas Finglas Emerging Preferred Route
NEW & ENHANCED TRACK TURNBACKS

2 New Turnbacks
1 Enhanced Turnback

Benefits
- Improved Operation Flexibility
- €tbc Budget

Timeline
- Multi-annual Programme

Details
- New turnback facilities at:
  - St. Stephens Green
  - Heuston Station
- Enhance existing turnback at Smithfield
- Greater operational flexibility
- Enables more flexible timetables
- Minimises the effect of line disruptions to services
Additional capacity for Green Line

Addresses bottlenecks in the system

Junction modifications / improvements

Upgrade traffic signalling system

Grade separate some junctions

Caters for projected passenger growth

TBC

Budget: €tbc

Network Enhancements

Green Line – 30 Trams per Hour

Grade separate junctions

Traffic signalling improvements

New turnback facilities
Multi-Annual Programme

- Abbey St and Busárus Stop are first planned projects
- Improve pedestrian mobility and accessibility
- Improve interchange between Red & Green Lines & other transport modes e.g. Connolly Station
- Public realm improvements
- Improved security / addresses anti-social behaviour
- Promote urban regeneration
Details of Projects at Early Planning
High capacity radial service responding to high demand in study area

- Enables future development

Proximity to two SDZ’s

- Enables regeneration

Interchange with bus, rail and other light rail lines

- Public realm enhancement opportunities
LUAS POOLBEG

Details

- 3 Stops
- 2 km Route Length
- €100-250m Budget

Timeline

- 2021 Pre-feasibility
  - NDP
- 2021 Pre-feasibility
  - Earliest Possible
- TBC 2027+
  - Planning Submission
  - Next Stage
- TBC +4 yrs
  - Passenger Operation
- 2024
  - Planning Submission
  - Next Stage
- 2028
  - Passenger Operation

Benefits

- Serve area set for high density development
- Enables future development
- Facilitate Poolbeg SDZ and Dublin Port Masterplan
- Enables regeneration
- Interchange with bus, rail and other light rail lines
- Public realm enhancement opportunities
LUAS BRAY

2021
Project Appraisal
Current Stage

TBC 2027+
Planning Submission
Next Stage

TBC +5 yrs
Passenger Operation

NDP

Earliest Possible

❑ Additional rail link to Bray
❑ Link to major future development site at Fassaroe
❑ Potential link to Shankill
❑ Improved connectivity to surrounding areas such as Cherrywood & Loughlinstown

❑ Potential interchange with bus, rail and other light rail lines
❑ Enables future development
❑ Enables regeneration
❑ Public realm enhancement opportunities

Qty
Stops
tbc

7-11 km
Route Length

€tbc
Budget

Timeline

Details

Benefits
Public Transport Project Stages
## Public Transport List – Project Stage

### Early Planning

Projects designated. ‘Early Planning’ in this document are considered to be at one of the following Phases of the National Transport Authority (NTA) lifecycle:

- Phase 1: Scope & Application
- Phase 2: Project Concept & Option Selection

This includes projects at Pre-Appraisal or Strategic Assessment Stage of the Public Spending Code Lifecycle. There are currently three strategic projects at Early Planning.

### Planning & Design

Projects at ‘Planning and Design’ stage are considered to be at one of the following Phases of the NTA lifecycle:

- Phase 3: Preliminary Design
- Phase 4: Legislative Process

This includes projects either in the Preliminary Business Case stage or the Final Business Case stage of the Public Spending Code Lifecycle and as such, may have been through Decision Gate 0 and progress towards Decision Gate 1. MetroLink and Luas Finglas are categorised as being at Planning and Design.

### Progressing to or at Construction

Projects at ‘Progressing to or at Construction’ stage are considered to be at:

- Phase 5: Detailed Design & Tender Process
- Phase 6: Construction and Implementation

This includes projects in the Final Business Case stage of the PSC lifecycle and have been through Decision Gate 2 and possibly Decision Gate 3. A range of projects captured under the Public Transport Network Enhancements (PTNE) portfolio are currently in this phase.

### Close Out

Projects at ‘Construction’ stage are considered to be at:

- Phase 7: Close Out and Review

This includes projects where construction has been completed such as the Green Line Infrastructure Upgrade (GLIU) and Green Line Capacity Enhancements (GLCE).
Alignment with National Strategic Outcomes and Public Spending Code
National Strategic Outcomes

1. Compact Growth
2. Enhanced Regional Accessibility
3. Strengthened Rural Economies and Communities
4. Sustainable Mobility
5. A Strong Economy supported by Enterprise, Innovation and Skills
6. High-Quality International Connectivity
7. Enhanced Amenity and Heritage
8. Transition to a Low-Carbon and Climate-Resilient Society
9. Sustainable Management of Water Waste and other Environmental Resources
10. Access to Quality Childcare, Education and Health Services
### National Strategic Outcomes and Active TII Public Transport Projects

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TII must ensure that all individual projects and investment proposals relating to public transport projects meet relevant appraisal processes and value-for-money tests required under the Public Spending Code (PSC), before Exchequer resources are ultimately invested.

The Public Spending Code identifies a Project Lifecycle that includes a series of steps and activities necessary to take proposals from concept to completion and evaluation. These decision gates are listed in adjacent Table 1 and mapped against the NTA’s appraisal lifecycle illustrated in Table 2 on page 8.

There are six project phases or steps required by the Public Spending Code to bring a proposed project from concept to completion and evaluation. The project lifecycle is not necessarily linear and projects can move sequentially or loop back as different circumstances change.

The NTA’s Project Approval Guidelines are highlighted overleaf and mapped against those of the Public Spending Code.

TII has extensive experience evaluating, planning and managing public investment in alignment with the Public Spending Code. This document identifies the current stage of each project as at November 2020.

<table>
<thead>
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<th>Table 1 - Decision Gates</th>
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<tr>
<td>Government approval is required at:</td>
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<tr>
<td>• Decision gate 0: Strategic Assessment – to develop proposal</td>
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<tr>
<td>• Decision gate 1: Preliminary Business Case</td>
</tr>
<tr>
<td>• Decision gate 2: Final Business Case 1 – to proceed to tender</td>
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<tr>
<td>• Decision gate 3: Final Business Case 2 – to award the contract</td>
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It is the responsibility of TII to inform Government should adverse developments occur, including unforeseen changes to costs or scope throughout the lifecycle of the project.
Table 2 - Lifecycle phases and decision gates

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<th>PSC Stage</th>
<th>Strategic Assessment</th>
<th>Preliminary Business Case</th>
<th>Final Business Case</th>
<th>Implementation</th>
<th>Review</th>
<th>Ex-Post Evaluation</th>
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<td>1 - Scope and Application</td>
<td>2 – Project Concept &amp; Option Selection</td>
<td>3 – Preliminary Design</td>
<td>Tender documents</td>
<td>Monitoring Reports</td>
<td>Project Completion Report</td>
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<tr>
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<td>Strategic Assessment Report</td>
<td>Preliminary Business Case (to be published)</td>
<td>Detailed Project Brief/ Procurement Strategy</td>
<td>Final Business Case</td>
<td>5 – Detailed Design &amp; Tender Process</td>
<td>6 - Construction and Implementation</td>
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<tr>
<td></td>
<td>1 – 2 Years</td>
<td>2 – 3 Years</td>
<td>2 – 5 Years *</td>
<td>3 – 5 Years</td>
<td>Overall 8 – 15 Years</td>
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</table>

- Decision Gate 0 – Approval to develop proposal
- Decision Gate 1 – Approval in Principle
- Decision Gate 2 – Pre-tender approval
- Decision Gate 3 – Approval to proceed
- Intervention Points where required
- Reflection of findings in PSC implementation arrangements

* Including allowance for judicial review of planning decisions
Investment Priorities
Investment Priorities

• Public Transport capital investment is guided and prioritised by several transport policies and strategies including:

1. Project Ireland 2040: National Planning Framework (NPF);
3. Transport Strategy for the Greater Dublin Area 2016-2035;
4. Cork Metropolitan Area Transport Strategy 2040;
5. Galway Transport Strategy among others;
6. DTTaS Smarter Travel Policy, by providing reliable public transport options to reduce the need and dependency on cars;
7. Climate Action Plan (2019,) which promotes public transport and aims to encourage modal shift to public transport and active modes; decarbonise the public transport fleet. This is accompanied by Action 90 of the Plan to expand the capacity of the Luas network.
8. Strategic Investment Framework for Land Transport (SIFLT). This gives recognition of the significant benefits realised from the initial two Luas lines constructed, concluding, “[…]which indicate that transport infrastructure investment in Ireland can yield a good return on investment, particularly so in respect of LUAS”;