

Case study

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Document structure

## MSP® Practitioner course - Case study

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### Improving the Connectivity- Building a Multimodal transport system

Williamtown is a large bustling city teeming with a population of 5 million. Originally consisting of a group of islands, Williamtown has seen phenomenal growth in the last two decades – fuelled by growth of industries and influx from rural areas.

Williamtown consists of four Blocks – West Block, East Block, South Block and North Block. These Blocks were built around the islands around them. Whereas West and South Blocks have traditionally been more industrialized, recent population growth has been the highest in East and North Blocks- resulting in increased connectivity related issues.

The haphazard growth of the city has resulted in commutivity related issues. The roads laid down – decades back – are mostly narrow and cannot cope up with increasing traffic – especially with multimodal transport used by residents of Williamtown. The city’s civic authorities have been getting increasing complaints from the citizens on the need to increase connectivity and reduce commuting times – especially to the industrialized segments of the city.

**Fred** has been appointed as the new Chairman of the Williamtown Transport Authority (WTA) – with the mandate to improve the connectivity across the city. Fred will have powers to oversee the development and operations of multimodal routes of transport- including bus, surface mode trains and underground tube system and provide a unified integrated system. WTA has about 200 personnel working across multiple offices.

Fred has been discussing the problems with civic authorities and notes down following issues:

- Connectivity between the newly developing East/North Blocks to the West/South Blocks needs to be improved
- Integration between various modes of transport needed to be better. Whereas public understand connecting every part of every other part in the city is virtually infeasible, the public would expect a synchronized mode of transportation across multiple modes of transport, reducing travel times.

The civic authorities have envisaged a new integrated multi modal system for the city.

Fred has been able to get a provisional funding of £ 1000 million to build an integrated multimodal transport system for Williamtown. £ 500 million of this funding will come from a conglomerate of private funding organizations and £ 500 million is expected to be funded by government (civic authorities). As far as feasible, Fred would like to minimize



the funding from private funding organizations. The expectation of the private funding organizations is that they would need to get atleast 10% ROI each year. The government wants an assured return of 8% ROI .Both private and public funding organizations prefer that the programme to be completed within 4 years of inception.

## The programme

Fred needs to build an integrated multi modal system for Williamtown. 'Initiating the programme' is expected to take 2 weeks and 'Defining the programme' is expected to take another 4 weeks. Closure activities for the programme are expected to take 2 weeks. The funding for these will be done out of WTA budget (outside the current programme budget).

The funding will enable Fred to take up four projects- as under:

### Project 1 (Tube rail connection between East and West Blocks)

- Build a new tube railway line between East and West Blocks
- Individual milestones in the project include laying of tracks and buildings, purchase of coaches, building the commercial and operations systems and 'Go Live'. Laying of tracks and buildings is expected to be completed in first six months of the project. Purchase of coaches thereafter is expected to take 2 months. Building of commercial and operations systems parallelly can start after commissioning of tracks and buildings and is expected to go for 4 months. Final 'Go Live' testing is expected to take 2 months.

The expected timeline for completion of the project is one year – with a total cost of £ 300 million. Post project – the expected revenues are £ 50 million per year for next 9 years. (It may be assumed that all expenses and revenues are attributed to the end of the corresponding years).

- The new line is expected to cut down the travel time by 15 minutes on an average from the existing mode of transport for travel across these two Blocks.

### **Project 2 (Building of new bus Bays in East Block)**

- This project involves building of new bus bays near the newly constructed tube rail station in the East Block
- The project duration for the project is 6 months –and this project needs to commence after tracks and buildings are completed as a part of project 1.
- The total outlay for this project is £ 100 million. The local bus transport authority will operate the bus services and WTA will lease out the bus bays to the local transport authority and it expects to realize £ 15 million per year for the next 9 years.
  
- There is an expected benefit that the public will take less time in reaching East Block tube station– because of more frequent services to the additional bus bays. An average reduction of 10 minutes commuting time to East Block tube station is expected from this.

### **Project 3 (Elevated railway from North Block to South Block)**

- This project will connect North Block with South Block with a new elevated track system
- This project is expected to take 24 months to go live and can be taken up after project 1 gets over- taking into account the resource bandwidths available with WTA.
- At the end of year 1 of this project, the elevated tracks are expected to be completed and year 2 end of the project will be for trial operational runs and completing commercial and infrastructure arrangements
- The expected cost for this Project is £ 400 million (£ 200 million spending in each year) and the expected revenues are £ 50 million in year 1 after completion and £ 70 million from year 2 onwards for next 7 years after completion of the project.
- The average travel time for these two locations is expected to reduce by 30 minutes on commissioning of this line

### **Project 4 (Remodeling of South Block tube railway station)**

- The South Block tube railway station will be remodeled and rebuilt to accommodate more passengers
- A duration of 6 months and a budget of £ 100 million has been set for the project
- The remodeling can start after the project 3 is 50% complete from schedule perspective and due to resource constraints..
- It is expected that a revenue of £ 15 million per year will start accruing on completion of the project through more gate receipts and lease rentals of shops for a duration of 8 years after the completion of the project.



## Programme Organisation

Fred will take the role of the SRO.

**James** – working under Fred in WTA will take the role of the programme manager.

Four separate project managers will be assigned for the four projects and all of them will report to James.

In addition, the Mayor of Williamstown would like to oversee the programme and the representatives of the private funding organizations would also like to be represented in key decision bodies. The resident welfare associations from all the four Blocks are beneficiaries and would like to be associated with the programme.

WTA has a programme office – maintaining records and in charge of application of governance arrangements for the programme.

The programme management activities (including that of the programme office) is expected to cost £ 55 million across the programme lifecycle (£ 5 per year for 11 years of programme lifecycle). This excludes Initiating, Defining and closure activities- which will be funded out of WTA budgets. James and Fred agree to keep a margin of £ 15 million for addressing any deviations on account of ‘estimating errors’ from baselines. A further £ 30 million is estimated to cost for the publicity and business transformation costs as the projects go live and benefits start to accrue from end of year 2 to end of year 11 (at the rate of £ 3 million per year).

## Benefits expected

- Increased connectivity across various segments of Williamstown
- Lesser congestion in roads and reduced waiting times/accidents
- Providing affordable and safe transportation across various Blocks, preserving the environment as much as possible
- Enhanced image for WTA in handling multiple projects and programme from capability building
- Upskilling the personnel of WTA in project and programme management
- Better rapport with the City Civic authorities (i.e Mayor etc) for sanctioning of future new schemes
- The programme in the long run should enable informed decisions to be made on travel (i.e. choice of routes, modes and schedules), reduce pollution , improve utilization of existing transport capacity and enable long term transportation planning

### Current status

- The funding has been approved for the programme in principle – though the actual release will happen based on the progress of individual projects/programme
- The programme organization structure is in place
- The local municipal council is divided on the viability of the programme - especially the viability of project 2 in particular is causing concern to the local civic authorities
- The expected commercial tariffs for the new services are seen to be too high by the local resident welfare associations – so the traffic volumes may not be met if the public perceives the services to be too costly- which may reduce the benefits
- James has to obtain clearance from the environmental agencies as some of the projects involve cutting of trees etc and these approvals could take more time than expected.

**Suggested documents for the Williamtown case study  
(Improving the connectivity- Indicative solutions ver 2011)**

**1. Programme Brief**

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| <p>Outline vision statement of the programme</p>                                      | <p>The end goal of the programme to provide faster, cheaper and safer commutivity for the population of Williamtown city across its various Blocks. The end goal also envisages reducing congestion and pollution in the city and enable the population to make informed decisions on the mode of travel in the longer run.</p>  |
| <p>Outline description of major benefits and when they are likely to be achieved?</p> | <p>The programme envisages launching of four projects to achieve the benefits as under:</p> <ul style="list-style-type: none"> <li>- Reduced average time for connectivity across Blocks (from current levels as stated in appendix) by atleast 10%</li> <li>- Reduced pollution levels – atleast by 5% (from the current baseline levels as stated in the appendix)</li> <li>- Reduced number of accidents (from the current level given in appendix ) by atleast 5%</li> <li>- Providing affordable transportation for the population of Williamtown – reducing the average fare by 10% (from the current baseline levels given in appendix).</li> </ul> <p>A significant dis-benefit could be that while constructing the infrastructure / lines etc – the traffic flow in the city would be significantly disrupted.</p> <p>All the benefits are expected to be accrued from 2<sup>nd</sup> year of the programme . Benefit tolerances have been specified for various benefits.</p> |
| <p>Estimated costs , timescale and effort for the programme</p>                       | <p>The expected funding for the programme is £1000K. The total costs for the programme is expected to be taken care by this funding as of now.</p> <p>The programme is expected to get concluded by end of year 3.5 and the benefits will be accrued by the end of 11<sup>th</sup> year of the programme.</p> <p>The programme will be jointly executed by WTA, civic authorities, other municipal agencies etc. with representations from residents’ welfare associations as joint effort.</p>  |



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| <p>Major risks and issues/ constraints and assumptions/ Level of support of stakeholders which is required</p>   | <ul style="list-style-type: none"> <li>- The culture change which is required from the residents of Williamstown is a prerequisite for the programme to succeed</li> <li>- Level of support required from Civic authorities is to be high to make the programme to succeed</li> <li>- A major risk is that the public may not perceive the proposed pricing pattern to be suitable to them</li> <li>- All the costing and pricing computations have been done with current inputs/assumptions. In case of significant changes, the programme plan is liable to undergo a revision</li> <li>-The projects in the programme have been identified to produce the optimum mix of benefits.</li> <li>- It is essential that the civic authorities and resident welfare associations to launch an awareness sessions amongst the citizens to use mass transportation systems once they get implemented to reduce congestion.</li> </ul>  |
| <p>Options for delivery known at this time/ Initial listing of projects known at this time/ assessment of current state/ business operation and performance which will be impacted by change</p> | <ul style="list-style-type: none"> <li>- The programme will be funded through a combination of public/private partnership and involvement</li> <li>- In case, this programme is not taken up now, the congestion levels and the pollution levels are expected to rise by 10% in the coming five years</li> <li>- The average commuting time will keep increasing if corrective actions are not taken</li> <li>- In order to get the benefits four projects have been identified through consultation with respective stakeholders. The list of these projects, their relative timelines etc are given in appendix.</li> <li>- The business areas which will be impacted include the metro (tube) rail system, bus transport authority and the related commercial and operational units. Some overlapping of activities is inevitable at this time.</li> <li>- An ongoing proposal to put a mono rail connection between East and West Blocks will be stopped – as this will be addressed by the proposed tube rail connection between these two Blocks.</li> </ul> |
| <p>Major governance arrangements (optionally can be included in brief)</p>   | <p>The programme will be overseen by a steering committee – including joint representatives from WTA, civic authorities, impacted organisations and the resident welfare associations</p>  |

## 2. Programme organisation structure

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| <p>Programme organisation structure</p> | <p>SG – Mayor, Civic Representatives of all the Blocks, Major representatives of funding organisations, Fred.</p> <p>SRO – Fred/ Programme manager - James</p> <p>Programme board – Fred, James, Civic representatives of Blocks, representatives of funding organisations, Resident welfare association representatives, Representatives of Tube railway and Bus transport organisations, Lead Supplier , Executives of the four projects</p> <p>BCMs- Civic representatives of Blocks, representatives of funding organisations and Resident welfare associations, representatives of tube railway and bus transport organisations</p> <p>Business change teams – joint teams established in each Block with civic representatives and resident welfare associations</p> <p>Programme office – Existing WTA programme office- with additions to resources for collecting data from four projects and for communication management activities.</p> <p>A new Center of Excellence (COE) may be set up to collect best practices and lessons learnt for this programme- funding for which will be done by WTA, to improve their project and programme management capabilities. This COE can be set up from year 3 of the programme as per current predictions.</p> <p>The internal audit team of Mayor’s office will carry out healthchecks and audits of the programme. They will also undertake programme assurance.</p> <p>WTA will have their internal assurance team to check the programme on an ongoing basis- they will mainly operate for healthchecks.</p> <p>A central benefit realization manager from the Mayor’s office will provide assurance and review of the benefits as portrayed by WTA. It will also ensure there is no duplication across various initiatives taken by the City Municipal corporation.</p> |
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### 3a. Stakeholder engagement strategy

- The Stakeholders will be identified during ‘Defining a programme’ as a significant activity.
- Fred, James, the Civic authorities, impacted infrastructure and transportation agencies, resident welfare associations will be involved in identification of further stakeholders
- The groupings of stakeholders will be done as under:
  - Users/ beneficiaries
  - Influencers
  - Providers
  - Governance
  
- The grouping of the stakeholder as per their importance/ influencer and impact will be done jointly done by Fred and James.
- For grouping of any stakeholder concerning major civic authorities , the Mayor needs to be consulted
- The updation of the stakeholder register will be done at the end of each tranche. If the tranche is of more than 6 months’ duration, a mid-tranche review and updation of this register can be done at the end of six months
  - The stakeholder register will be kept confidential and to be shared only with SRO by the programme manager , for grouping and action points relating to sensitive stakeholders
  - Negative publicity for the programme can be coming from resident welfare associations/ elected representatives and some of the affected organisations ( as in existing private bus operators). The first two stakeholders can have a negative image of the programme due to transport bottlenecks etc. They need to be educated that temporary hardships may be required to enhance the capability of the infrastructure in the longer run, Bus transport agencies need to be convinced that the new infrastructure may not be taking away their business significantly.
- The programme will communicate with stakeholders in multiple ways:
  - Monthly bulletins/ update meetings
  - Six monthly roadshows
  - Communications to key stakeholders on the gist of the programme progress
  - Website updations
  - An open mail address will be provided for the concerned stakeholders to give any feedbacks required for the programme
  - The success of the communication will be measured from conversion of their status from negative or neutral stakeholders to positive stakeholders.
- The success of the programme will also be measured by gauging the participation levels of stakeholders in monthly update meetings
- James will be responsible for preparing and updating the stakeholder engagement strategy. Fred will be responsible for all communications to SG and with external funding agencies , public etc

**3b. Stakeholder profiles (for three representative major groups of stakeholders)**

| <b>Content of the profile</b>                         | <b>Civic authorities</b>  | <b>Resident Welfare associations</b>   | <b>WTA</b>   |
|---|---|--|--|
| Key areas of interest (represented as a map)          | Local economy, Citizens' concerns, Safety, Pollution levels   | Affordability, safety, pollution levels, preserving of environment, safeguarding of privacy if applicable  | Engagement Profitability, Upskilling of capabilities, Sustained funding and controlled spending                              |
| Concern/ sensitivity                                  | Re-election, image  | Whether their grievances have been addressed, whether the fares will be suiting them etc   | Image of successfully executing a programme<br>Further programmes from the civic corporations                                |
| Likely level of support for the programme             | Moderate-positive   | Moderate - neutral   | High – positive  |
| Areas of programme they will be interested in and why | Programme outcomes and benefits- if the funds are used properly, if the benefits are being realised adequately  | Programme outcomes and benefits  | Programme and project outputs, outcomes and benefits- fund utilisation, benefit realisation, capability enhancement          |
| Levels of stakeholder influence on the programme      | Very high   | medium   | High   |
| Influence interest matrix                             | Very high - high  | Medium – Medium – to get converted into high high  | High- High – need to convert into very high – very high  |
| Benefits distribution                                 | Will receive the benefits concerning city's image, lesser pollution, better commutivity – not directly – but as | Will directly get the benefits of lesser pollution, better commutivity.<br><br>Will be affected by the dis-benefit of congestion during programme implementation | Will directly get the benefits of enhanced capabilities for programme management, repeat fundings for further programmes etc |

|                                  |   |   |   |
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|                                  | perceived by stakeholders               |   |   |
| Key influencers within the group | Mayor,<br>Elected civic representatives | Resident welfare association presidents | Fred, James, PMO and other key project executives |

#### 4. Programme communications plan

| Heading  | Content   |
|--|---|
| Schedule of communications activities                  | <ul style="list-style-type: none"> <li>- Weekly progress report from project managers to the project executives and to the programme manager</li> <li>- Monthly summary of the project status by the project executives to the programme manager</li> <li>- Monthly summary of programme status by programme manager to programme board</li> <li>- Tranche level summary of the progress by the SRO to programme board and to the SG</li> <li>- Monthly townhall meetings by the Programme board</li> <li>- Monthly vendor review meetings</li> <li>- Benefits assessment meetings with resident welfare associations and elected representatives/ Mayor as and when they fall due</li> </ul> |
| Objectives of each communication                       | <ul style="list-style-type: none"> <li>- Review of project progress by the programme manager</li> <li>- Review of programme progress by the programme manager/ SRO</li> <li>- Communication of programme status to key external stakeholders</li> <li>- Review of benefits by key stakeholders</li> </ul>   |
| Key messages of each communication and level of detail | <ul style="list-style-type: none"> <li>- Progress report needs contain status, progress and forecast and status of key issues and risks</li> <li>- Communication meetings need to contain the overview status of the progress and any messages from external stakeholders to elicit their cooperation etc</li> <li>- Status reports to top management should not exceed one page</li> <li>- Meetings with key stakeholders need to be interactive</li> </ul>  |
| Description of channels                                | <ul style="list-style-type: none"> <li>- Progress reports – through emails/ interactive chats etc</li> <li>- Reports to Civic and funding agencies – written reports</li> <li>- Communication with external stakeholders – interactive media like townhall meetings</li> </ul>  |
| Feedback mechanisms                                    | <ul style="list-style-type: none"> <li>- Reverse feedback can be given by any level to next higher level in programme organisation</li> <li>- Elected representatives can call the SRO and SG as needed to detail out their concerns</li> </ul>   |
| Information Storage systems                            | <ul style="list-style-type: none"> <li>- All the information on the programme will be stored in defined folders</li> </ul>  |
| Possible stakeholder objections to the communication   | <ul style="list-style-type: none"> <li>- Some of the stakeholders may be sensitive to the medium of communication and may prefer more interactive types of channels</li> </ul>  |

## 5. Benefit profiles

| Heading   | Content  |
|---|--|
| Benefit identifier/ Benefit descriptor  | Benefit number 3- Reduction in pollution in Williamtown  |
| Related observable outcomes from the programme implementation   | By implementing the programme, the number of personal vehicles for commuting is expected to go down resulting in reduction in pollution levels   |
| Category of the benefit   | Value/ Stakeholder impact  |
| Representative KPIs in the business operations that will be affected by the business  | <ul style="list-style-type: none"> <li>- Reduced congestion in roads</li> <li>- Reduced number of vehicles on road</li> <li>- Reduced number of accidents</li> </ul>   |
| Current or baseline performance levels  | - Air quality Health index – currently measured at an average of 4 (moderate health risk)  |
| Benefit realisation and business change costs   | <ul style="list-style-type: none"> <li>- The Civic agencies have to launch awareness for mass commuting through propagandas at an additional cost of £ 200 million over the lifecycle of the programme</li> <li>- Additional bus bays/ car parking lots may need to be created near rail stations</li> </ul>   |
| Capabilities required for the benefits to be realised/ which projects within the programme are directly related to benefits realisation | <ul style="list-style-type: none"> <li>- The mass transportation system needs to enhance the capability to intake additional population which will be diverted once the programme outcomes are implemented</li> <li>- The four projects directly lead to the capabilities as specified alongwith their description</li> </ul>  |
| Outcomes that will need to be in place to enable benefit realisation/ Dependencies on contributory events                               | <ul style="list-style-type: none"> <li>- Civic agencies need to launch parallel programme to increase awareness for the need for the programme to the public</li> <li>- Resident welfare associations need to launch an awareness programme for the programme</li> <li>- Succeeding elected representatives need to continue to give support for the programme</li> </ul>                            |
| Business changes required for realization (process, people etc)   | <ul style="list-style-type: none"> <li>- People need to change the mindset to use public transportation instead of personalized transportation</li> <li>- People need to be ‘patient’ when the programme is executing – to bear the dis-benefits in the longer interests of benefits</li> <li>- The funding agencies need to release the funds faster for smooth running of the programme</li> </ul> |

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| Related issues and risks relating to the full realisation of the benefit (May be for the full programme) | <ul style="list-style-type: none"> <li>- If the ROI is not forthcoming – private financiers may withhold further fundings</li> <li>- If the party changes power in the elections due in two years – the scope of the programme may get changed</li> <li>- The programme approach and parameters are based on projected volumes of population, vehicle ownership etc for the next ten years. If these are not holding to be true – the programme parameters can get changed</li> </ul>                            |
| BCMs of the area getting impacted  | <ul style="list-style-type: none"> <li>- Resident welfare associations</li> <li>- Corporate representatives</li> <li>- Vehicle owners</li> </ul>   |
| Attribution (Who is the benefit owner and the operations area that will receive the benefit)             | <ul style="list-style-type: none"> <li>- Benefit owner – City’s population – as represented by resident welfare associations</li> <li>- Operations area which will receive the benefit / measure the benefit: City’s health department</li> </ul>  |
| Measurement  | <ul style="list-style-type: none"> <li>- Air quality health index – as stipulated by ISO standard ----</li> <li>- The benefit will be measured on an yearly basis from the end of second year of the programme until the end of 11<sup>th</sup> year.</li> <li>- It is expected that the air quality health index reduces to 3 at the end of year 3 of the programme and reduces to 2 and stays at 2 from the end of year 5 onwards.</li> <li>- A tolerance of +/- 0.5 is permitted for this benefit.</li> </ul> |



## 6. Programme blueprint

The programme can be divided into multiple tranches.

Tranche 1 – At the end of 6 months – which completes laying of tracks and buildings of project 1

Tranche 2 – At the end of 12 months – which completes project 1 and project 2

Tranche 3- At the end of 24 months – after completion of 50% of project 3

Tranche 4- At the end of 36 months – after completion of projects 3 and 4

Tranche 5- At the end of 48 months after the programme (for operational / benefit measurement) (This could as well be downsizing of the programme office if need be)

Tranche 6 – At the end of year 10 of the programme. (do)

Closure – At the end of year 11 of the programme.

| <b>Heading</b>   | <b>Content (typical at end of tranche- as applicable and indicative)</b>   |
|--|--|
| Processes and business models including operational costs and performance levels for the required vision of the future state | Processes –<br>a) Integrated ticketing systems for bus and train systems<br>b) More stringent processes for registration of new vehicles which have poor emission controls<br>c) Processes to measure emission standards etc           |
| Organisation- structure and staffing levels , culture etc  | a) New organization for operating the tube railway and busways<br>b) New Organisation for integrated ticketing systems   |
| Technology- IT systems, Tools , equipment, building  | a) New online booking systems for tube railways<br>b) New decision making models for population to use cheapest and most effective commuting models<br>C) New buildings will be built for facilitating the operation of new facilities |
| Information and data required to effectively manage future operations  | a) Revised/ New timetables / fare tables for the tube and bus schedules<br>b) Actual operating schedules of new routes<br>c) Pollution level measurements<br>D) Traffic congestion measures  |

## 7. Programme business case

| <b>Heading</b>  | <b>Content</b>   |
|---|--|
| Strategic objectives for the programme- aligning with the organisational context and business environment | The strategic objective of the programme is to enable the commuters in Williamstown to make informed decisions on quicker, safer and affordable travels- through a multi modal transportation system. The programme also seeks to reduce high pollution levels prevalent in the city – to make the city a healthier place to live in the coming decade.  |
| The expected benefits with the organization’s ability to achieve the necessary transformation and change  | The major benefits are given in appendix ( also stated in programme brief). Williamstown’s civic authorities, transport agencies, WTA and the resident welfare associations are fully committed to achieve the required change to make the programme successful  |
| The overall risk profile, indicating major risks to the programme delivery and benefit realisation        | The aggregate risk profile exposure for this programme is currently is moderate. Appropriate risk response measures are being taken to reduce it to ‘Not significant’ status   |
| Estimated costs and overall timescales  | Excluding the programme management processes ( Initiating/ Defining and Closure) – the overall programme timeline is estimated to be running for three years- with an aggregated costs going upto £ 1000 millions.   |
| Investment appraisal  | The programme costs and expected revenues have been considered and the ROI has been calculated based on Average Rate of return principle. The expected returns are deemed to be adequate enough to meet the investors’ requirements of rate of return  |
| Forecasts of cash flow and expenditure over the programme timeline  | The spreadsheet in appendix shows the expected cashflows during the lifecycle of the programme. As is seen – the programme is expected to yield positive cash inflows from end of year 4 to end of year 11. The overall net return on the programme is expected to be above 25% , across the programme lifecycle.  |
| Options and approaches which have been considered   | The other options considered include :<br><ul style="list-style-type: none"> <li>- Widening the roads – providing a short term respite</li> <li>- Increasing more buses only – Though affording mass transportation, is not expected to cut down traveling time significantly and may not be able to cope up with population growth in the coming decade</li> <li>- A mix of multi modal transport – Elevated/ tube and bus transportation systems – is expected to provide the stated benefits and is the chosen option.</li> </ul> |

## 8. Programme Plan

| <b>Heading</b>  | <b>Content</b>  |
|---|---|
| An overall programme schedule showing the sequence of projects in the project dossier | Appendix in the spreadsheet shows the overall sequence of projects in the programme – showing relative timelines  |
| Dependency network showing the project input and output relationships                 | <p>As given in the spreadsheet- Project 2 commences after 6 months of commencement of Project1 and Project 4 commences after 1 year of commencement of project 3.</p> <p>These dependencies have been put – mainly taking into account resource constraints within WTA and not too much from the physical dependencies required</p>   |
| Cross references to risk register and to any planned risk responses                   | <p>Few of the major risks concerning the programme are:</p> <ul style="list-style-type: none"> <li>- The funding may not be released in time</li> <li>- Approvals from civic authorities may not come in time for works involving cutting of trees etc</li> <li>- The residents of Williamtown may not adopt the redesigned commuting patterns fast</li> <li>- ...</li> </ul> <p>The risk register contains these risks and proposed responses, which are being kept updated.</p> |
| Issues  | <p>Some of the civic authorities are not convinced about the viability of project 2.</p> <p>The business case for this project is being relooked into and a new presentation is being made to them soon.</p>  |
| Transition planning information and schedules   | As noted in the transition plan in appendix   |

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| <p>Programme level management activities required to implement the monitoring and control strategy</p> | <p>In order to implement the monitoring and control strategy – few major groups will be formed for monitoring purposes:</p> <ul style="list-style-type: none"> <li>- Project level monitoring group – consisting of programme manager, project executives and other key stakeholders – to resolve the intra project level dependency related issues- typically at a weekly basis – but can be called if there are major escalations which require immediate resolution</li> <li>- Escalation routes for project level issues: Issues which require escalation from a single project – will be routed through the corresponding project executives to the programme manager and the concerned BCMs – on an event driven basis</li> <li>- Programme level progress review committee- Consisting of programme board and other senior level executives – on a monthly basis</li> <li>- Tranche end review meetings – by the SG , programme board and other key representatives</li> </ul> |
| <p>Details of programme tranches</p>   | <p>Given in the blueprint</p>   |
| <p>Estimated effort and costs associated with the plan</p>   | <ul style="list-style-type: none"> <li>- The programme management activities (including that of the programme office) is expected to cost £ 55 million across the programme lifecycle (£ 5 per year for 11 years). This excludes Initiating, Defining and closure activities- which will be funded out of WTA budgets.</li> <li>- A margin of £ 15 million for addressing any deviations on account of ‘estimating errors’ from baselines has been kept</li> <li>- The actual programme management costs (due to technical deliverables) is given in the appendix spreadsheet across the years</li> </ul>   |
| <p>How the monitoring and control strategy will be deployed?</p>                                       | <ul style="list-style-type: none"> <li>- Weekly progress report from project managers to the project executives and to the programme manager</li> <li>- Monthly summary of the project status by the project executives to the programme manager</li> <li>- Monthly summary of programme status by programme manager to programme board</li> <li>- Tranche level summary of the progress by the SRO to programme board and to the SG</li> </ul>   |

### 9. Risk register (representative entries for a major risk)

| <b>Heading</b>                              | <b>Content</b>   |
|---|--|
| Risk identifier and description of the risk | <p>Risk # 3 – Approval for cutting trees may not be coming in time for carrying out major infrastructure works.</p> <p>Cause – the environment board is quite conservative in giving approvals for cutting down of trees<br/>           Event – the approval for cutting of trees as needed for the work may not come in time<br/>           Effect – the concerned projects may be delayed – delaying the dependent projects and the programme as a whole</p> |
| Probability                                 | <p>Inherent – 0.8 (major risk)<br/>           Residual – 0.4 ( residual – after proposed risk actions have been implemented)</p>   |
| Impact on the programme                     | <p>Pre-response : High from time overrun and cost overrun factors<br/>           Post-response – Medium from above perspectives</p>  |
| Proximity of the risk occurring             | <p>From the commencement of the programme – especially the projects 1 and 3 will be most severely impacted during their schedules if this risk were to occur- as these projects require most of felling of trees etc</p>   |
| Description of the proposed risk response   | <ul style="list-style-type: none"> <li>- Align routes to have minimal tree felling</li> <li>- Undertake to create more green cover for the trees cut</li> </ul>  |
| Risk owner                                  | Programme manager  |
| Risk actionee                               | Design engineer/ Environment specialist  |
| Current status of the risk                  | The risk is still at an inherent state   |

## 10. Quality and assurance plan

| Heading   | Content  |
|---|--|
| Schedule of activities required to implement the quality and assurance strategy   | <ul style="list-style-type: none"> <li>- Designated persons from the central programme management office will be responsible for quality and assurance. They would be different from persons who provide support for the programme</li> <li>- Quality and assurance activities will be done both on a event driven and time driven basis.</li> <li>- End of each month, the assurance activities will be undertaken to check if all the strategies are being adhered to and if the plans are being updated on a proper basis</li> <li>- At the end of each tranche, the complete review will be undertaken to measure the tranche success against stated performance levels ( including in Key Performance Indicators)</li> <li>- Corporate quality assurance will perform year end quality assurance activities to ensure the programme is being conducted as per corporate quality standards</li> <li>- Gated reviews will be undertaken by the Mayor’s office on each of the tranches – to check if the money (especially the money from public funds are properly spent and accounted for).</li> </ul> |
| Explanation of how the assurance arrangements will be deployed and who will undertake these activities/ how and when the programme will undertake audits and healthchecks and reviews | <ul style="list-style-type: none"> <li>- Projects will be subjected to quality assurance from the programme level PMO (which can be called a temporary programme office)</li> <li>- Programme will be subjected to quality and assurance from the permanent office – set up in WTA and consisting of independent auditors</li> <li>- Gated reviews will be undertaken by the Mayor’s office – by the internal audit team from the Mayor’s office</li> <li>- In addition, independent consultants may be deployed to perform quality audits on a need basis or undertake healthchecks as needed</li> <li>- Project outputs will be subject to quality reviews as per strategies defined in the respective quality management strategies</li> </ul>  |
| Information on how and when quality of work will be monitored and reported  | The respective strategies at the project management and program quality and assurance lay down the schedules- which would need to be adhered to  |
| Estimated effort and costs associated with the plan   | These costs at the Identifying and Defining the programme/ Closure activities have been included in WTA budget . Programme management costs include the rest of the costs for quality activities during the actual execution of the programme.   |



## 11. Programme transition plan

| Heading (Activities to be taken up during) | Content   |
|--|---|
| <b>Pre-transition</b>                      | <ul style="list-style-type: none"> <li>- The source data for the benefits (as-is measures) are collected – even during say ‘Identifying or Defining a programme’</li> <li>- The performance measures for the benefits are put and updated in the benefit profiles for the corresponding benefits</li> <li>- The roles and responsibilities for benefit measurement and updation , benefit owners are decided and updated in benefit profiles</li> <li>- Impacted KPIs and benefits are monitored throughout the programme execution</li> <li>- Transitions are planned – including staff and working practices, information and technology, temporary facilities, cultural factors, maintaining business operations during transition . Thus in the current programme, the transportation authorities will plan for operationalising the facilities applicable for the tranche, educating the population to adopt new commuting practices, etc.</li> <li>- It is important to communicate the change to affected stakeholders. Normally, townhall meetings and meetings with respective resident welfare associations should be held to apprise them of the changes. The programme communications plan will inform of the schedule for communications.</li> <li>- The BCMs and Fred will assess the readiness for change. This can happen towards the end of each of the tranches – when the projects have delivered the outputs. The steps herein would involve making sure that the concerned project outputs can indeed be operationalised ( as of opening of lines), necessary support infrastructure exists and adequate publicity has been done for the changes.</li> </ul> |

|                                      |  |
|--------------------------------------|--|
| <p><b>Manage transition</b></p>      | <p>The transition is initiated and support arrangements are established. The operational staff are briefed and help desk etc are created to cater to initial handholding problems. Fred needs to confirm that the transition can indeed start – then the transition can be actioned on. The business change teams play a key role in transitioning. The KPIs are monitored to assess the stability of the transition.</p> <p>Once the transition has occurred, the programme board would need to review the success of the transition. The lessons are all documented and the follow on action recommendations from projects are actioned on. The outcomes are achieved and are communicated upon.</p>   |
| <p><b>Manage post-transition</b></p> | <p>Once the transition has been done – the benefits are measured. The techniques for measurement would be given in respective benefit profiles. This is especially true of the current programme – when Fred and James need to measure what is the reduction in congestion levels and what is the occupancy rates of newly commissioned rail lines and how many people are using integrated multi modal systems.</p> <p>It is essential that the old routes and timetables be changed and the new routes and timetables are put in place as soon as possible- else people will continue to use the existing systems.</p> <p>It is quite likely that new requirements keep coming and the programme should be able to respond to changing requirements. New projects could be identified to optimize the routes etc and could be included in the projects dossier.</p> <p>Finally, benefits are monitored and reported. If the benefits move out of tolerances – this needs to be escalated to Fred and SG. BCMs will be vested with the responsibility of updating the benefit values.</p> |



## 12. Programme closure activities

The current programme could close when the initial benefits are accruing and rest of the benefits are expected to accrue due to momentum of the programme.

If the programme is on track – it could as well be technically downsized at the end of tranche 5 as defined in the blueprint above ( at the close of 48 months after the commencement of the programme). By this time – all the projects would have been closed and the initial benefits would have started to accrue.

A skeleton staff in WTA and other beneficiaries can be kept until the logical closure of the programme (end of 11th year) to measure subsequent benefits- when the programme can be formally closed.

The closure activities to be done by James (and other key stakeholders include the following):

- WTA and James need to ensure that ongoing support for the programme is in place and all the rail lines and the bus bays are working properly
- The ongoing maintenance and support arrangements need to be stabilized – including commercial arrangements etc
- There needs to be a mechanism to address risks post programme closure
- Communications need to be sent to all the stakeholders ( especially the SG, programme board, funding agencies etc) that the programme is about to close
- Fred will confirm programme closure to the SG – who will confirm programme closure
- A final review will be done of the programme on the benefits realised thus far – and any residual benefits to be realised post-closure
- The programme plan and related documents are updated for the final time
- It is important to provide feedback to the civic authorities on the programme- on to the extent it met the objectives and what could have been done differently
- The programme organisation is disbanded and the respective business functions ( as rail and bus transportation authorities etc) are handed over the responsibilities of measuring further benefits and making post closure corrections as needed.

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