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Introduction

Project Overview

The B-Line Bus project is a large transport infrastructure plan to enhance public transit on the Northern Beaches and Lower North Shore of Sydney. This project is in line with the other ongoing and planned improvements in the transport network by Transport for NSW in the Greater Sydney area. The B-Line Bus project aims at adding dedicated bus lanes, better bus stops, and higher service turnover primarily in these Regions to manage the escalating demand for environment-friendly and efficient transport systems. The project is still in project initiation, and the Project Charter shall be signed or is under consideration by the project approval.

Project Objectives

The primary objectives of the B-Line Bus project are:

- **Improving Transport Accessibility:** To improve transport services and means available to cater to the northern geographical area of Sydney especially the Northern Beaches and Lower North Shore.
- **Enhancing Connectivity:** For the designed B-Line Bus system to be able to interface with other transport systems such as rails, ferries, and other buses.
- **Reducing Congestion:** Aimed at reducing traffic congestion by providing a high-capacity transport solution that will replace personal car usage for sustainable travel.
- **Supporting Economic Growth:** The project's objectives include the improvement of public transport availability as a means of boosting economic activities, as well as employment opportunities during the development of the transport system and its utilization.

These goals and objectives will be achieved by investment in infrastructure, providing sector technology, and community outreach.

Stakeholder Overview

The successful delivery of the B-Line Bus project requires the involvement of multiple stakeholders, each with specific roles and responsibilities:

- **Transport for NSW (TfNSW):** The most important stakeholder requiring planning and funding of the project as well as implementation of the project plan.
- **NSW Government:** Being the decision maker, the government is also responsible for coordinating the project with other general and specific transport master plans in the region and the state.

- **Local Communities:** Ordinary citizens, traders, and passengers who will be on the receiving end of better transport services.
- **Contractors and Consultants:** These external parties will be involved in the outlining, building, and sustaining of the B-Line Bus infrastructure.

Project Justification

The justification for the B-Line Bus project is rooted in several key factors:

- **Meeting Growing Demand:** The Northern Beaches and Lower North Shore are in particular experiencing a high growth rate of populations which puts pressure on the existing transport system. To meet this need, the B-Line Bus project provides efficient public transport that can outcompete the existing ones in terms of speed.
- **Economic Impact:** Expected socioeconomic impacts of the project include positive effects on communities' economic base since it is believed that the provision of key links to strategic locations will improve tourism attractiveness, and business development as a result of improved access routes.
- **Safety and Reliability:** The new system will offer a safer and more efficient mode of transport, time-saving, comfort, and a better experience for transport users.

This project captures the long-term goal of the New South Wales Government to integrate a transport system directed towards growth in the economic and social framework across the region.

Project Charter

Project Title and Description:

B-Line Bus Project: Improving Transport Access in the Northern Beaches and Lower North Shore of Sydney

The B-Line Bus project intended to provide a high-frequency efficient and sustainable mode of transport for travelers on Northern Beaches and the Lower North Shore of Sydney. This project will therefore introduce an express bus service to decrease time, enhance transport, and help shape a better urban transport system.

Project Scope Overview

The B-Line Bus Project ambit also encompasses the design, development, and implementation of the B-Line express bus routes. This will include setting up of dedicated bus corridors, building new bus terminals and coupling with existing transport systems, and procurement of new buses. Other elements of the project will also include traffic regulation and the enhancement of pedestrian amenities in relation to stands. The project will be done sequentially through the design and planning phase, acquisition of facilities and systems, construction of infrastructure and system conversion, and finally the provision of services.

Key Deliverables

Table 1 Project Scope Overview Key Deliverables

Deliverable	Description
Design and Construction of Bus Lanes	Dedicated lanes which will confirm fast and reliable bus operations.
New Bus Stations	New or reconstructed stations that offer comfort to the passengers.
High-Capacity Buses	Buses that can transport numerous commuters, and their acquisition and use.
Integration of Real-Time	Technological advancement to capture real-time images of

Systems	buses on the road to display them to passengers.
Community Engagement and Feedback Mechanisms	The public needs to be involved through surveys, forums, and public hearings to establish if the service provided meets the public expectation.
Project Documentation	Execution of all technical, financial, and legal documents needed for the business.

Stakeholder Register

Table 2Stakeholder Register

Stakeholder	Role and Responsibilities
Transport for NSW (Project Sponsor)	Responsible for funding and oversight.
Northern Beaches Council (Local Government)	Involved in planning and environmental approvals.
Commuters/Residents (End Users)	Key beneficiaries of the improved bus service.
Contractors (Construction and Design Teams)	Responsible for building the infrastructure and deploying the bus system.
Community Groups	Provide input on design and service delivery to ensure local needs are met.

High-Level Milestones and Success Criteria

Table 3 High-Level Milestones and Success Criteria

Milestone	Description	Target Completion Date
Project Approval and Initiation	Signing-off by the stakeholders of the project charter document.	Month 1
Design and Planning Phase	Development of the bus lane and station designs, obtaining permits.	Months 2-6
Construction Phase	Completion of bus lanes and stations.	Months 7-18
Testing and Operational Trials	Operate first services of actual real-time data systems at hand.	Month 19
Full Deployment and Service Launch	The commissioning of the full B-Line Bus service to the public.	Month 24

Success Criteria:

- **On-time Delivery:** This project must be delivered on time with little or no instances of slippage in the delivery period.
- **Within Budget:** The cost of the total project must also be within the prescribed financial limit.
- **Community Satisfaction:** Reports from customers, especially those from the city and daily commuters after the launch of the car.
- **Operational Efficiency:** The system should cater to targeted bus frequencies and passenger carrying capacity.

Scope Management Plan

Project Justification

The B-Line Bus project to cover the parts of Northern Beaches and Lower North Shore in Sydney is being implemented with an aim to improve public transport access in a densely populated region. The primary political aim is to offer efficient, punctual, and environmentally friendly transport solutions with the ultimate goal of enhancing passengers' satisfaction. This project meets the long-term vision of Transport for NSW to improve the connectivity of public transport networks as well as resolve concerns relating to traffic congestion in the region by providing innovative environmentally friendly transport solutions.

In-Scope and Out-of-Scope

In-Scope:

- Establishment of bus priority measures in several areas of the Northern Beaches and Lower North Shore.
- New additions of bus stations and shelters to enhance convenience for the passengers.
- The growth of other related installations including parking lots, traffic control signals, and ramps for the physically challenged travelers.
- Connection to other transport service points for example ferry terminal and other bus lines.

Out-of-Scope:

- Growth of other modes of transport in addition to better employment of the B-Line Bus network.
- Non-B-Line bus services that will not form part of the new network will also have to be provided.
- Any change in the residential areas of the city or land used for acquiring new bus lanes that are outside the planned

Constraints and Assumptions

Constraints:

- **Time:** The project is operationally constrained to an expected completion in 2025 to meet the demand and to synchronize with other transport services.
- **Budget:** This project needs to be confined within the budget, approved under the Transport for NSW infrastructure program so any extra work beyond the scope or any feature that is to be incorporated must be accompanied by a reallocation of the budget.

- **Environmental Regulations:** The construction phase is very sensitive to various environmental concerns and therefore it requires passing through environmentally sensitive assessments and permits which makes it expensive and time-consuming.
- **Weather Conditions:** Adverse weather conditions are a major factor that affects construction, especially when performing outdoor tasks during the construction of bus stops as well as the installation of relevant structures.

Assumptions:

- The absence of time-related issues involving access to the essential resources that are vital for construction such as materials and human resources.
- Expected that the communities would not be much of an obstacle in the further building of the new infrastructures.

Technical Requirements and Statement of Work (SOW)

- **Bus Lanes:** The lanes have to accommodate traffic turn volumes and their width and signs put in place must be clear to allow easy maneuvering during those hours.
- **Bus Stations:** They should also have various facilities that may include real-time screen informers about trains, shelters, and rest areas.
- **Sustainability:** This project will involve conscious effort towards the conservation of the environment by; the use of recycled products on stations and buses, and efficient methods of lighting.
- **Safety:** The infrastructure will be designed in accordance with the Australian safety regulations and requirements such as fire safety, access to emergencies, and safety of pedestrians.

The **Statement of Work (SOW)** defines that the project will be completed in phases: A sequence of activities is as follows in general: planning, design, construction, testing, and, finally integration with other existing systems.

Work Breakdown Structure (WBS) (250-300 words)

The **Work Breakdown Structure (WBS)** for the project B-Line Bus is a structure of the project deliverables that are subdivided hierarchically into sections in order to produce all required parts.

Table 4 Work Breakdown Structure (WBS)

WBS Level	Description	Work Package

1	B-Line Bus Project	Complete project management and delivery
2	Infrastructure Design and Construction	Design and building of bus lanes, stations, and supportive infrastructure
3	Bus Lane Design	Design of bus lanes, lane markings, and signage
3	Station Design and Construction	Design and building of stations, shelters, and amenities
3	Traffic Systems Integration	Upgrade of traffic signals, road crossings, and parking facilities
3	Environmental and Safety Compliance	Environmental impact assessments and safety audits

The WBS dictionary will be established to include detailed descriptions, responsibilities, and timelines for each work package.

Scope Verification and Validation

Table 5 Scope Verification and Validation

Method	Description
Stakeholder Reviews	Regular feedback from stakeholders such as local government, transport authorities, and community representatives.
Inspection and Testing	Conducting inspections to ensure deliverables, such as bus lanes and stations, meet technical and safety standards.
Formal Acceptance	The client (Transport for NSW) formally accepts the deliverables after successful testing and validation.

Scope Change Control

Table 6 Scope Change Control

Step	Description
Change Request Submission	Proposed changes must be documented and submitted to the Change Control Board (CCB).
Impact Assessment	The change is evaluated for its potential impact on scope, time, and cost.
Approval/Rejection	The CCB decides whether to approve or reject the change based on its impact on project goals.
Implementation	If approved, changes are implemented, and necessary adjustments are made to the project plan.

Change Control Board (CCB) and Roles

Table 7 Change Control Board (CCB) and Roles

Role	Responsibilities
Project Manager (Chair)	Oversees the change control process and ensures changes align with project goals and schedule.
Stakeholder Representatives	Ensure changes meet community and client expectations.
Technical Leads	Evaluate the technical feasibility and impact of proposed changes.
Finance Officer	Assesses the financial implications of changes and ensures they fit within the project's budget.

The CCB will convene once a month or more frequently if needed in order to discuss change requests and project change management.

Schedule Management Plan for the B-Line Bus Project

This schedule management plan describes how the B-Line Bus project schedule will be planned, developed, monitored, and controlled and includes activity duration estimation, defining and managing project milestones, and definition of the critical path.

Activity List and Sequence

The Activity List presents a list of all work to be done to accomplish the B-Line Bus Project with the activities arranged in a reasonable order to advance the project.. Key activities include:

Table 8 Activity List and Sequence

Activity ID	Activity Description	Predecessor(s)	Duration (Days)	Resources Required
A1	Preliminary Design and Approval	-	10	Design team, Stakeholders
A2	Procurement of Materials and Services	A1	15	Procurement team, Suppliers
A3	Construction and Installation	A2	30	Construction team, Contractors
A4	Testing and Quality Assurance	A3	10	QA team, Testing equipment
A5	Staff Training and Orientation	A4	5	Training team, Trainers
A6	System Integration and Final Testing	A5	15	IT team, Testing team
A7	Project Closure and Reporting	A6	5	Project Manager, Reporting team

Activity Sequence Relationships (FS, SS, SF, FF)

Table 9 Activity Sequence Relationships (FS, SS, SF, FF)

Activity 1	Activity 2	Relationship Type	Lead/Lag (Days)
A1	A2	FS (Finish to Start)	0
A2	A3	FS (Finish to Start)	0
A3	A4	FS (Finish to Start)	0
A4	A5	FS (Finish to Start)	0
A5	A6	FS (Finish to Start)	0
A6	A7	FS (Finish to Start)	0

Schedule Baseline Details: Project Network and Gantt Chart

Table 10 Schedule Baseline Details: Project Network and Gantt Chart

Activity	ES (Earliest Start)	EF (Earliest Finish)	LS (Latest Start)	LF (Latest Finish)	Slack/Float
Preliminary Design	0	10	0	10	0
Procurement	10	25	10	25	0
Construction	25	55	30	60	5
Testing	55	65	60	70	5
Staff Training	65	70	70	75	5

System Integration	70	85	75	90	5
Project Closure	85	90	90	95	5

PERT Table for Duration Estimation

The PERT method is used to estimate the duration of each activity. The Expected Duration (TE) is calculated as:

$$TE = O + 4M + P \quad TE = \frac{O + 4M + P}{6} \quad TE = 6O + 4M + P$$

Where:

O = Optimistic time

M = Most likely time

P = Pessimistic time

Table 11 PERT Table

Activity	Optimistic (O)	Most Likely (M)	Pessimistic (P)	Expected Duration (TE)	Standard Deviation (SD)
A1	8	10	12	10	1.33
A2	12	15	18	15	2.00
A3	28	30	33	30	1.67
A4	8	10	12	10	1.33
A5	4	5	6	5	0.67

A6	12	15	18	15	2.00
A7	4	5	6	5	0.67

Critical Path Method (CPM)

The Critical Path Method (CPM) is a method whereby the project activities that influence the total project duration are determined. Originally, critical activities had no float time which implies that any delay would make the project longer. In the case of the identified project which is the B-Line Bus Project, the critical activities include; procurement of materials, construction and installation of the B-Line Bus, and integration of the system. These activities have sequences, which must be sequenced before moving to the next one, which is important in the completion of a project.

The CPM process involves calculating:

Earliest Start (ES) and **Earliest Finish (EF)** times.

Latest Start (LS) and **Latest Finish (LF)** times.

Activities on the critical path include:

A1 (Preliminary Design)

A2 (Procurement)

A3 (Construction)

A6 (System Integration)

This helps in distinguishing non-critical tasks with free time and therefore can be used as a flexible resource. Since the critical path is reviewed regularly, the project manager can monitor those critical activities to remain on track and control them when they are off track.

Milestone List and Activities Sequence

Table 12 Milestone List and Activities Sequence

Milestone	Description	Associated Activities
Project Charter Approval	Official approval of the project charter, which sets the scope and objectives.	Charter Development, Stakeholder Engagement
Design Approval	Completion and approval of the bus infrastructure design.	Design Finalization, Stakeholder Review
Procurement Completion	All necessary materials and services are secured for construction.	Supplier Selection, Contracts Finalization
Construction Phase Completion	Completion of major construction tasks (e.g., roads, bus shelters).	Construction, Quality Assurance
System Integration	Integration of new systems into the existing infrastructure.	Systems Testing, Software Implementation
Project Handover	Project completion and formal handover to operational teams.	Final Review, Handover Documentation

These tables enhance the readability of your **Schedule Management Plan** by clearly presenting the roles and their associated responsibilities, as well as important milestones that can be tracked throughout the project.

Roles and Responsibilities in Scheduling

The following roles and responsibilities ensure effective schedule management for the B-Line Bus Project:

Role	Responsibilities
Project Manager	Oversee project schedule, approve changes, and ensure deadlines

	are met.
Scheduler	Develop and maintain the project schedule, identify the critical path, and update timelines.
Procurement Lead	Ensure timely procurement of materials, and update procurement schedules.
Construction Lead	Oversee construction, and ensure activities are on schedule.
Testing and Commissioning Lead	Coordinate testing schedules, and manage commissioning activities.
Stakeholders	Approve milestones and activities, and provide feedback on schedule updates.

This team structure ensures that the project's schedule is actively managed, updated, and adhered to.

17 Schedule Monitoring and Control (EVM)

Earned Value Management (EVM) is used to monitor and control the schedule. Key metrics include:

Table 13 Schedule Monitoring and Control (EVM)

Metric	Description	Formula	Current Value
Planned Value (PV)	Budgeted cost of work scheduled to be completed by a specific time	$PV = (\text{Planned \% of Total Cost}) \times (\text{Planned Duration})$	\$100,000
Earned Value (EV)	Value of work completed by the same time	$EV = (\text{Actual \% of Work Completed}) \times (\text{Total Budget})$	\$80,000

Actual Cost (AC)	Actual cost incurred for the work completed	AC = Actual Cost	\$75,000
Schedule Variance (SV)	Measures how ahead or behind the project is	SV = EV - PV	-\$20,000
Schedule Performance Index (SPI)	Efficiency of time utilization	SPI = EV / PV	0.80

EVM will help track whether the project is on schedule and guide corrective actions.

Confidence Intervals and Probability Calculations

In the case of the B-Line Bus project, PERT will be employed to estimate the time required to complete activities and hence estimate the total project duration (TE) will be calculated. Additionally, the following calculations will be done:

Optimistic (O), Pessimistic (P), and Most Likely (M) durations will be used to calculate the expected time for each activity.

The project's expected time (TE) will be determined using the Critical Path Method (CPM).

We will calculate the following:

Project duration at 85% confidence:

$$TE + (Z \times \text{Standard Deviation}) \quad TE + (Z \times \text{Standard Deviation}) \quad TE + (Z \times \text{Standard Deviation})$$

For 85% confidence, $Z = 1.04$.

Project duration at 99% confidence:

$$TE + (Z \times \text{Standard Deviation}) \quad TE + (Z \times \text{Standard Deviation}) \quad TE + (Z \times \text{Standard Deviation})$$

For 99% confidence, $Z = 2.33$.

Probability of finishing 5% earlier than the original CPM duration.

Probability of finishing 10% earlier than the original CPM duration.

These probabilities will be derived using the **normal distribution** and will provide a more detailed understanding of potential project timelines.

Cost Management Plan

Cost Elements and Types

The overall concept of cost control for any given project entails the identification and control of cost factors and the classification of costs. The B-Line Bus project involves several cost components which include

Table 14 Cost Elements and Types for B-Line Bus Project

Cost Element	Description	Type of Cost	Cost Estimate Method
Labor Costs	Costs associated with employees working on the project (e.g., engineers, construction workers).	Direct, Variable	Bottom-Up, Parametric
Material Costs	Expenses for construction materials, buses, and related supplies.	Direct, Variable	Bottom-Up, Analogous
Fixed Costs	Non-variable costs like project management salaries, and office rent.	Indirect, Fixed	Top-Down, Analogous
Variable Costs	Costs that change based on project scale, such as fuel or utilities.	Direct, Variable	Bottom-Up, Parametric
Contingency Reserves	Additional budget to account for unforeseen costs.	Indirect, Variable	Bottom-Up, Three-Point Estimate

In cost control, each work package will have the activity costs allocated to them with an allowance for contingency cost estimates.

Cost Estimation Methods

Cost estimation is an integral part of cost management as this stage makes it possible to predict the amount of money needed to complete a project. The B-Line Bus project will apply multiple estimation methods to ensure an accurate and comprehensive budget:

Table 15 Cost Estimation Methods for B-Line Bus Project

Estimation Method	Description	Example Application
Top-Down Estimation	High-level estimate based on similar past projects.	Estimating the overall cost of infrastructure based on previous bus projects.
Bottom-Up Estimation	Detailed estimation by breaking down each project activity or work package.	Estimating costs for bus stops, routes, and construction.
Analogous Estimation	Using historical data from similar projects to estimate costs.	Using costs from a previous bus route construction project as a reference.
Parametric Estimation	Applying mathematical models to estimate costs based on specific parameters.	Estimating cost per kilometer of bus route.
Three-Point Estimation	Considering optimistic, pessimistic, and most likely cost scenarios.	Estimating cost for construction based on different material price scenarios.

The above-mentioned methods would be able to give a complete and variable cost estimate for the B-Line Bus project.

Budget Creation and Time-Phased Budget

Budgeting is one of the key elements of cost control that requires an explanation of the amount of funds necessary to achieve the goals of a project. The budget for the B-Line Bus project will be developed based on the details contained in the previous sections which explain the various estimation methods mentioned above. Each work package will be further decomposed into the WPs and costs will be estimated using bottom-up and analogous point estimates. These estimates

will then be combined to derive the total project costs and will be presented in detail to make up the overall project budget.

The time-phased budget will refer to the distribution of the budgeted costs over the given timeline of the project. This will assist in having resources at our disposal as and when they are required and also in controlling for costs at different phases within the process of managing a project. This budgeting approach will disburse funds to different activities according to the time frame for the B-Line Bus project completed. For example, the initial costs will be associated with land ownership, then the costs linked to the development of lines and stops. During the further work on the project, the main expenses will go for the acquisition of buses and completing the necessary infrastructure.

Other than the direct costs of the project, contingency reserves will be added to the cost structure to address such problems as fluctuation in the cost of material, project schedule setbacks, or other necessities that may develop in the course of completion of this project. These reserves shall be estimated in terms of the risk profile of the project and will be added under a certain % over the total cost estimate. For example, if there is a 10 percent probability that specific materials will be more expensive owing to supply chain disruptions, a contingency allowance of between 5 and 10 percent of the material costs will be incorporated into the budget.

Table 16 Cost Estimates by Work Package with Contingency Reserves

Work Package	Cost Element	Estimated Cost (AUD)	Contingency Reserve (AUD)	Total Estimated Cost (AUD)
Project Initiation	Labor	50,000	5,000	55,000
Design Phase	Material	80,000	8,000	88,000
Procurement & Vendor Contracts	Labor	30,000	3,000	33,000
Construction & Implementation	Material	150,000	15,000	165,000
Testing & Quality Control	Labor	40,000	4,000	44,000

Project Closing & Handover	Material	20,000	2,000	22,000
Total	-	370,000	37,000	407,000

A time-phased budget will most likely be a requisite document to be used for tracking and also controlling the project costs and preventing the project from rising to the unplanned costs.

Monitoring and Controlling Cost (EVM)

One crucial aspect of project performance is the ability to track and manage cost, without which a project often exceeds its set financial goals. In the context of the B-Line Bus project, the Earned Value Management or the EVM will be utilized as the primary corrective for costs.

Applying EVM techniques, project performance can be evaluated through the Planned Value (PV), Earned Value (EV), and Actual Cost (AC) of completed work. These measures will be performed periodically about the analysis of the project's financial status throughout the project life cycle.

- **Planned Value (PV):** This is meant by the value of the work intended to be done at a particular point in time.
- **Earned Value (EV):** This is the worth of the work that has been done in the real sense at any one time.
- **Actual Cost (AC):** This gives the actual cost of the work done which is the cost of the original items of materials and equipment.

With these values, the Cost Performance Index (CPI) and the Schedule Performance Index (SPI) shall be computed to determine the cost and schedule performance Status. A CPI value less than 1 means the project has overrun the total budget while a value more than 1 means the total budget has been overrun by the project.

Also, cost control methods such as cost forecasting will be used to anticipate more costs and other likely cost overruns. For instance, if we are having issues of project time, the Estimate to Complete (ETC) performance metric will be employed to show how much more money will be required to complete the project.

An evaluation of the costs and variances will be done frequently in order to determine the presence of cost fluctuations and the required solutions. If the cost variance goes beyond the

acceptable CSF level and therefore out of CSF range, corrective actions should be taken to either the project cost estimate or the project timeline to correct the project's financial position.

By frequently employing EVM in the project assessment, the B-Line Bus project will be capable of performing the tasks of achieving financial control and addressing the issues of cost anomalies.

Cost Baseline

The cost baseline is one of the key project documents which defines the project costs as approved by the project manager. It comprises all the planned expenses for a project in relation to time and is the financial structure of the project. Baseline will contain all estimated costs for labour, material, indirect costs, as well as contingency reserves and will be used to compare real cost during the execution of project.

In the B-Line Bus project, the cost baseline is going to be produced using the integrated time-phased budget with estimates for the work package. This document will be useful for comparison with cost performance and will serve to record the different costs of a project. All changes in the cost baseline will be strictly under change control to avoid going out of scope and or cost..

The identified cost baseline will be useful in ongoing project cost control as the project management team will be able to determine how to mitigate variances when detected and also guarantee financial sustainability of the project. Having frequent update and review of the cost baseline will assist in managing risks and achieving financial success to the B-Line Bus project.

Conclusion

This report has provided a comprehensive and sequential approach to managing the B-Line Bus project in Sydney's Northern Beaches and Lower North Shore. The initiative is concerned with improving the transport accessibility and developing transport infrastructure, which set goals are targeting to provide the sustainable, easily reachable, and effective public transport means for people of the living districts. With the three major components of project management; scope, schedule, and cost being addressed well in this plan, this plan lays sound ground for a successful project delivery.

The Scope Management Plan has logically defined and justified the main goals of the project, distinguished between work included into and excluded from the scope, and created a WBS to ensure effective actions. Realignment possibilities in a project consist in certain structures like a Change Control Board or defined approaches to scope validation. These tools support the project's effectiveness in preserving the delivery's purity and quality standards.

The Schedule Management Plan has outlined the process of how activities will be arranged, how it will be know when a phase is complete and approximate duration for each phase with the help of PERT and CPM. Through deployment of optimistic, pessimistic, and most likely time estimates, the schedule provides flexibility to the work plan in that it acts as a hedge regarding uncertain activities. Incorporation of Earned Value Management (EVM) techniques guarantee correct monitoring and steering of the project calendar to enhance the timely delivery of project deliverables.

The Plan of Cost Management encompasses a broad strategy of resources, funds, and expenses or costs identified and estimated towards the accomplishment of the project goals. It also adopts quantification and precision, bottom up and analogous estimates, in order to facilitate reasonable and accurate financial planning. Such tracking tools as EVM and the variance analysis go a notch higher to boost the compliance with the financial constraints it has despite working towards the set goals and objectives. The expected benefit of B-Line Bus project is to provide improved public transport system adding value to New South Wales' mission of a premier transport system. The project is intended to enhance the welfare of the residents by providing adequate houses, solving the congestion problem, and contribute to the realization of the sustainability policies within the state.

The last component is based on the premise on stakeholder management, monitoring and control and the underlying PM frameworks for the project to be successful. Symptomatically, by integrating communication of the scope, schedule, and cost management plans, this initiative is capable of realizing its goal and providing considerable value to the community that will advance the transportation future of Sydney.

Reference