Topic: Project Activity Timelines

Paper Type: Coursework

Word Count: 2600 words

Pages: 10 pages

Referencing Style: Harvard Referencing

Educational Level: Masters

Project Activity Timelines

[Writer's Name]

[Institute's Name]

Project Activity Timelines

A timeline of project management is a document that establishes the timeline for a project to benefit project managers and others involved in need to know about the deadlines and planned activities. Developing a timeline is a very important part of the planning process. When a project timeline appears again in post-mortem to determine if the project is kept on track, causing deviations, and how they could solve problems in the future. We can vary the level of complexity in a timeline of project management. It is also possible to have multiple timelines. It can provide insight to important landmarks, while a breakdown of the lines is smaller topics relevant to certain groups of people. In housing, for example, the general timeline could cover the permitting process, breaking the floor, framing and other events of great buildings (James, 2007). Crews will receive their own individual timelines of project management so they know what is expected of them and when.

Software project management often has a timeline feature. The Project Manager develops plans, can be slotted into the timeline segment of the program, which also can be easily adjusted as changes develop. For example, two events can be reduced to two weeks apart so they move together if something moves or delays the first event, to keep the timeline proportional project management level and accurate information on the project schedule (James, 2007).

In the course of a project, the project manager can use the timeline for planning, ordering and other activities. When events occur, may be marked on the timeline of project management. If a delay occurs, it can be observed, and notes can include a discussion of the nature of the delay and catch-up options. For example, reductions in a target area to hit a target will result in overall delay of the project. As the timeline of project management is aimed at companies and industrial

uses, it can also be useful for time management improvement projects in small children in the house (Reiss, 2007). Start planning before the end can save time by creating a framework that allows for tracking and anticipating needs. For example, someone working on a bathroom remodel needs to know when new sanitary equipment must arrive and when to order supplies diverse as lamps so that they can fit into the project.

The Knowledge phase of Time management mainly refers to tools, techniques and skills deployed in managing time while performing specific goals and projects. In order to run the Project in efficient time, the project manager must understand the Project activities and encompass the skills required to schedule, plan, Control and monitor the Project Timeline (Reiss, 2007). Apart from this, Project Management software can be used to better evaluate and measure the time. The 4 steps will help in managing the overall project duration.

Defining activities: The Project activities, milestones and tasks required in completion of project must be defined properly. The definition for each task must be provided and then details as the project goes on. This can be done through use of Gantt Charts that will outline the entire project. The focus here is on the Project time required to complete the project rather than dates (Adedeji, 2009).

Sequence of Activities: After defining all the activities, the activities will be sequenced in order. The activities will be placed in logical manner and connections will be shown for those activities that are interrelated. After sequencing, the dependencies for each activity will be assigned as any activity can be only started after the completion of one or two previous activities. For example, if the project is based on the creating a website, than development stage will be started after designing the website. The activity of design is considered as a prerequisite for the

development activity. If the actual time in the design stage exceeds the budgeted time then development activity will start late then the expected time (Adedeji, 2011).

Estimation of activity resources: This is considered as the most difficult steps. It is mandatory to assess the demand and supply of each resource in terms of manpower & Finance and how it relates to our project. The resources will be assessed to check whether additional resources need to deploy for completion of project at assigned time. After the individuals are assigned with their Tasks, than gain dependencies will be checked based on the allocation of resources. The activities might be overlapped, than we will deploy extra resources or accept to raise the project timeline due to resource dependencies (Huajun, 2010).

Develop and Control Programming: The Project schedule will be developed using Gantt charts. The Gantt charts will be checked before starting the project to ensure that it is fully equipped. The control programming refers to the Project manager monitoring the project status and ensuring that activities are completed on time and within its Scope & deliverables.

Work Breakdown Structures:

The process begins with WBS defining the nature and scope of the various sub-projects and how they relate to each other. However, achieving this is often not easy, because it is quite complex and a small mistake on part can seriously affect the successful implementation of the project (Eric, 2008). The structure is used to organise and define the overall scope of work needed to achieve the objectives of the project and make a graph. Each level represents a definition down a bit more detailed project objectives. The SRT is a system for dividing the project into a series of works, components and practical elements, providing a common

management and communication regarding the scope, timing and financial performance of the project (Robert, 2011). The development of the WBS allows the project team to structure and divide the scope of the project components practices, assign responsibilities for carrying out the work, facilitating communications and adequately promote the performance of participants.

The Minnesota Geospatial project will be conducted in six phases. The following 3 phases had been funded or are suggested for funding. The First phase includes Project Planning and coordination, requirements development, methods assessment and data gathering for east-central and north eastern Minnesota. The second phase deals with the completion of Methods evaluation, Map Production in Wetland for thirteen countries of East central Minnesota and data collection for thirty six countries of southern Minnesota. The third phase includes the Wetland mapping for thirty countries of South Minnesota and data collection for twenty two countries of Central Minnesota (Zhao, 2011).

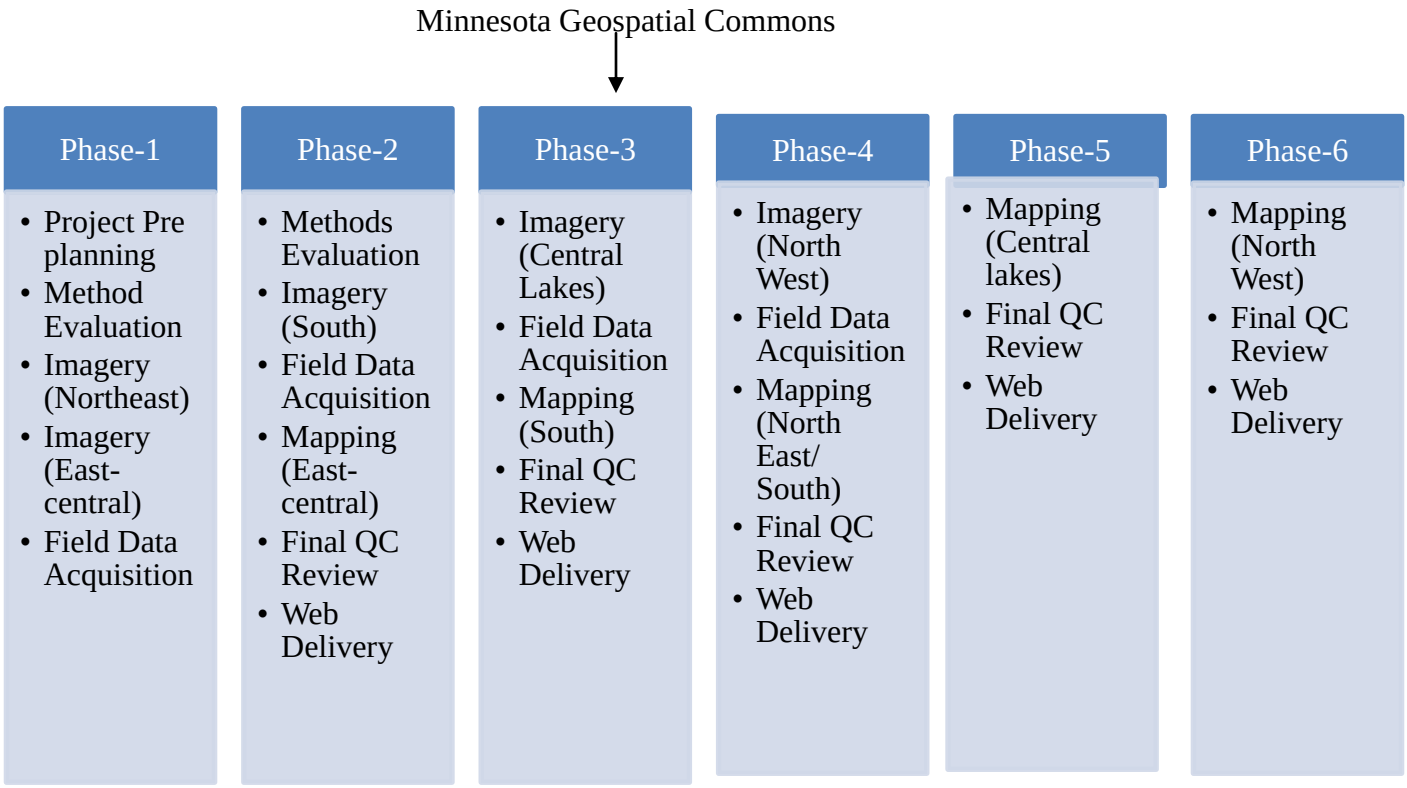
The requirements development is considered as vital part of every project. This Project comprises of 2 elements of this process: Assessing user needs and reviewing the federal standards of wetland Geographic Data. The user needs assessment will involve carrying out a Web survey of a wide cross section of users. The collected information will then combined and compiled with information of Geographic data standards.

The University of Minnesota will incur effort to evaluate and compile information over best possible methods available in cost effective mapping the wetlands. The New image data types will enhance the previous methods. Various mapping approaches and Image data types will be evaluated to test their sustainability for Mapping Wetland in overall state and pilot areas (Zhao, 2011). The University of Minnesota will evaluate and compile information on the best

possible methods available in terms of cost effective mapping. The new approaches and image data types are expected to enhance the previous methods. These approaches and image data types will also be evaluated for their suitability in mapping wetland of the overall state and in the pilot areas. The specific Mapping methods and data types to be evaluated includes LIDAR image data, Radar image data, Image Segmentation, NAIP image data and Wetland Probability maps (John, 2007).

The aerial imagery will be used as a primary data to update the NWI in Minnesota. Additionally, the collateral or ancillary data involving digital elevation data, soils data and radar might also be incorporated to increase the accuracy of Wetland Mapping. Some data will be acquired by agencies involved in the project. The progress over existing data will be briefed in the report of Data Availability Assessment which will also highlight the Critical data gaps (Daniel, 2011). A successful contract bidder will be selected to submit and develop a work plan on the project aspect for approval and review by TAC and DNR. The work plan will incorporate information over data and methods that will be utilised to formulate updated inventory maps of wetland, Schedule of Project milestones, requirements of Project staff and the Project Budget according to Tasks (Jie, 2011).

The Following is the WBS of Project:



Description of Project Activities

Activity-1: Establishing Common Ground

The Project advisors will conduct a meeting which will be followed by workshops in order to strengthen the stakeholder commitment and verify the project priorities and scope. In order to ensure active participation of the stakeholders, the workshops will be conducted at various regions of the state. The Total Budget set for this activity is $35,000. The initial activity will commence from 1st December 2012.

Outcome	Completion Data
Start up Meeting of Project advisory committee	20 December-2012
Environmental Commons	10- January -2013
The Finalisation of detailed technical specialisation and design priorities	15- February-2013
Total Days	76

Activity-2: Creation of Environmental Commons

The Web services, mapping sites and Catalogues will be searched for all the environmental data. The Web services make use of various standards to integrate data from real time multiple sources. The commons will fix together such as MN Geospatial Clearinghouse, Data finder and Data Deli. The Total Budget set for this activity is $130,000. This activity will commence from start of February. The First 2 activities are not dependent on each other.

Outcome	Completion Data
Interface for Design of "Environmental Commons"	5-February-2013
Current Services, mapping and data identified and catalogued	26- February -2013
Interface for Testing &	15- March-2013

implementation of "Environmental Commons"	
Total Days	44

Activity-3: Developing Real- Time Geospatial Web Services

The Technical contractors and Mn Geo will develop Geospatial Web Services that are required for real time data integration. The Project team will also work in collaboration with Web developing organisations. The Total Budget set for this activity is $ 135,000. The third activity is dependent on first activity and it will only commence after the completion of first activity. If activity 1 is finalised on 15 February 2013, then it will commence from the next day.

Outcome	**Completion Data**
Collection of Data sources Supported by Documented Web services	20-March-2013
Services required to assist developed integrated map services	5- April-2013
Total Days	49

Activity-4: View Map for Environmental Commons

Implementation and design of an integrated view map that provides available data through Map interface. The ECO view will gather data in real time system to update it. This will be easily accessible to people through normal web browsers and it doesn't require GIS skills (Kathleen, 2007). The Total Budget set for this activity is $ 125,000. This activity is interrelated with First and third activity and if there is a delay in any of these 2 activities, then 4th activity will be started late.

Outcome	Completion Data
ECO view (V1): Availability of Environmental Commons view Map	7-May2013
ECO view (Beta): Completion of Environmental Common View Map	26- May-2013
Total Days	51

Activity-5: Prototype Analysis and Environmental Modelling

This activity includes the development of Water Network Trace and Flood inundation models. The Trace model will utilise hydrographs network data with high resolution to discover the downward effect of surface water contamination. The Total Budget set for this activity is $ 250,000. The Fifth activity will start after completion of 2nd activity. This will start 16th march 2013 if the second activity is completed on time.

Outcome	Completion Data
Completion of prototype model and Flood inundation	9-June-2013
Completion of Surface water Trace model	20-June-2013
Integration of Model into Environmental Common View Map	5-July-2013
Total Days	110

The Following Duration table shows 3 estimated times for each activity: Most optimistic time, most probable time and most pessimistic time. The Probability for most optimistic time usually occurs between 10 to 20 percent, chances for most probable time is 50% while the most pessimistic time has probability of 80 to 90 percent of the time. The percentages will vary

according to the schedule of the project end date. The following Mathematical model is used to calculate the estimated time:

$$Te = \frac{To + (4\ x\ Tm) + Tp}{6}$$

Activity	**To (most optimistic time)**	**Tm (most probable time)**	**Tp (most pessimistic time)**	**Estimated Time**
Establishing Common Ground	15	40	62	39.5
Creation of Environmental Commons	8.5	24	35	23.25
Developing Real-Time Geospatial Web Services	9.6	25	39	24.76
View Map for Environmental Commons	12	26	42	26.33
Prototype Analysis and Environmental Modelling	20	53	86	53

Project Schedule:

The Project Tasks with their estimated completion dates and Resources are provided below:

Task	**Estimated Completion Date**	**Status**	**Resources**	**Work Groups**	**Sponsors**
Prioritisation and definitions of Preliminary Functions	5/5/2012	Done	-	-	-
The agreement of Workgroup to implement the ESRI	12/5/2012	Done	-	-	-

Geo portal Toolkit					
Approval of Project charter	28/5/2012	Done	-	-	-
Launching of Online Survey	6/6/2012	Done	-	-	-
Creation of Rough Project Plan	10/7/2012	Done	-	-	-
The Rough Project plan reviewed by Work Group	26/8/2012	Done	-	8	-
Configuration options & Research Functionality	3/9/2012	Done	-	-	-
Identifying Training needs of Project Team	10/9/2012	Done	1	-	-
Approval of Project Plan by the Work Group	20/10/2012	In progress	-	5	-
Identification of a Host server	25/12/2012	-	-	-	-
Clarification regarding documentation of Web service	5/1/2013	-	-	-	-
Designing the procedure over which geoportal software & its parts will link with the current architecture	15/1/2013	-	2	-	-
Reporting over the results of survey and its comparison with the functions	2/2/2013	-	-	-	-
The approval of project plan by Project manager, owners and sponsors	20/2/2013	-	-	-	3
Forming a configuration plan	4/3/2013	-	-	-	-
Installation of Firewall and Hardware connections	19/3/2013	-	1	-	-
Completion of Online	4/4/2013	-	-	-	-

survey					
Compilation of Survey Results	10/4/2013	-	-	-	-
Development of a Test plan, Traceability matrix and test cases	6/5/2013	-	1	-	-
Submission of the Metro GIS funding scheme	21/5/2013	-	-	-	-
Contribution of Individual agencies to the resources	11/6/2013	-	-	15	-
Testing of Implemented functions	19/6/2013	-	-	15	-
Revise the service or data contributions	30/6/2013	-	-	6	-
Presentation of Commons at LIS Consortium Conference	9/7/2013	-	2		-
Evaluate how the implemented functions will assist the needs of work group	19/7/2013	-	-	10	-
Description of the requirement of any other Functionality	7/8/2013	-	-	10	-
Modification of Implementation if required	22/8/2013	-	-	-	-
Suggestion over how Functionality can be created	5/9/2013	-	-	-	-
Suggestion that whether ESRI product can be applied to Production site	21/10/2013		-	-	-
Formation of draft proposal for production commons	30/10/2013	-	-	-	-
Approval & modification of the	8/11/2013	-	-	-	-

recommendations for a production commons					
Formation of Draft project plan for production commons	23/11/2013	-	-	-	-
Approval & modification of the project plan for production commons	9/12/2013	-	-	-	-
Reporting to the geospatial community and stakeholders	14/1/2014	-	-	-	-
Development of Model Service level agreements	20/1/2014	-	2	-	-
Communicating the benefits of Shared services	28/1/2014	-	-	-	-

References

Adedeji B. Badiru, (2009), Project Management: Systems, Principles, and Applications Industrial Innovation, Oxford: Published by CRC Press,

Eric S. Norman & Shelly A. Brotherton, (2008), Work Breakdown Structures: The Foundation for Project Management Excellence, Cambridge: Published by John Wiley & Sons

Huajun Chen & Yimin Wang, (2010), Semantic e-Science, Volume 11, published by Springer, pg: 134-142

James P. Lewis, (2007), Fundamentals of Project Management, 3rd edition, London: published by AMACOM Div American Mgmt Assn,

Jie Han & Daniel E. Alzamora, (2011), Geo-Frontiers 2011: Advances in Geotechnical Engineering, Published by ASCE Publications, pg: 355-368

John J. Hannon, (2007), Emerging Technologies for Construction Delivery, Published by Transportation Research Board, pg: 93-102

Kathleen L. Hancock, (2007), Integrating geospatial technologies into the right-of-way data-management process, Published by Transportation Research Board

Reiss A, (2007), Project Management Demystified, 3rd edition, published by Routledge, pg: 77-84

Robert McMaster & Helen Couclelis, (2011), The SAGE Handbook of GIS and Society, Published by SAGE, pg: 222-231

Zhao, P. & Di, L. (2011), Geospatial Web Services: Advances in Information Interoperability, Hershey: Published by IGI Global