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Evaluation of Capital Development Guidelines

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Abstract

The Capital Management Branch (CMB) of the Department of Human Services (DHS) in Victoria, Australia, sponsored this project, to conduct the first official audit of its Capital Development Guidelines (CDG), which assist stakeholders in planning and delivering capital projects. We received stakeholder feedback through interviews and a web survey. Recommendations were made to the CMB that will make the CDG more effective in assisting stakeholders to plan and deliver DHS capital projects, typically costing between A\$1,000,000 and A\$350,000,000.

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List of Acronyms

- o CEO: Chief Executive Officer
- o CDG: Capital Development Guidelines
- o CIM: Capital Investment Manual
- o CMB: Capital Management Branch
- o DHS: Department of Human Services
- o DOH: Department of Health Services
- o FAQ: Frequently Ask Questions
- o GPC: Government Procurement Council
- o IQP: Interactive Qualifying Project
- o ISB: Information Services Branch
- o IT: Information Technology
- o NHS: National Health Services
- o NSW: New South Wales
- o OH&S: Occupational Health and Safety
- o PCG: Project Control Group
- o POE: Post-Occupancy Evaluation
- o PPE: Post Project Evaluation
- o PPG: Procurement Plans Guidelines
- o PV: Partnerships Victoria
- o SAM: Strategic Asset Management
- o TCV: Treasury Corporation Victoria
- o WPI: Worcester Polytechnic Institute

Executive Summary

The Capital Management Branch of the Department of Human Services in Victoria, Australia, uses a series of guidelines they have developed to assist all stakeholders in the planning and delivery of capital projects for a variety of facilities (hospitals, nursing homes, community centres, etc.) with costs ranging from A\$1,000,000 to A\$350,000,000. The Capital Development Guidelines (CDG) apply to all DHS funded capital projects regardless of cost. At over 800 pages and over 25 sections, the guideline series encompasses all aspects of the project planning and delivery process.

This project aimed to act as the first official CMB-sponsored audit of the guideline series with the focus upon gathering stakeholder feedback. If successful, the outcome of this project will enhance the Capital Management Branch's Capital Development Guidelines, making the task of taking a capital project from start to finish easier for the stakeholders. In order to accomplish this, we first needed to establish a focus for the evaluation.

We developed the focus and an understanding of possible improvements needed through extensive background research. This involved understanding how the capital planning and development process works and the history of the Capital Development Guidelines. Through interviewing CMB staff members and examining similar capital project systems, we developed not only a personal understanding of the process, but also developed four key areas which to focus our evaluation on. These areas, with their objectives, included:

1. <u>Access</u>: To investigate the current method stakeholders are using to access the information, any difficulties they are encountering, and how they would prefer to access the CDG.

- 2. <u>Presentation</u>: To investigate whether the CDG present information in a sufficient format to allow stakeholders to clearly understand what is required, particularly with respect to low-cost projects and the use of reference material.
- **3.** <u>Content:</u> To investigate if the level of detail within the guidelines is appropriate, to assess the necessary material needed in the guidelines, and to uncover any specific problems within the guidelines.
- 4. <u>Education and Assistance</u>: To investigate the current ways in which stakeholders are receiving assistance on the guidelines and how stakeholders or training could feel education or training could be applied to the CDG.

To uncover the necessary information, we obtained feedback on the CDG from stakeholders focusing on the access, presentation, and content of the guidelines as well as feedback on user education on the DHS capital planning and delivery process. We accomplished this task through a methodology consisting of interviews and a web survey.

We used semi-structured interviews to gather in-depth responses from stakeholders to the four areas mentioned above. Through interviewing 28 stakeholders from agencies, consultants, and project managers, we captured anecdotal data on their experiences using the guideline series. The stakeholders interviewed came from the DHS Program areas, agencies, consultant firms, and the CMB project mangers.

We also used a web survey to complement the information obtained from the interviews. Using a DHS in-house software program, called eForms, with help from the DHS Information Services Branch (ISB), we developed and conducted a web survey of 239 stakeholders from different agencies, consultant firms, and branches within DHS. The web survey focused less upon anecdotal data and more upon respondents' opinions to proposed changes to the CDG series, such as the creation of an education program, providing new sections on new procurement strategies, and different methods for improving access to the information within the guidelines.

Based on an analysis of our results of our methodology, we developed conclusions about the current state of the Capital Development Guidelines and the needs of the stakeholders. Based upon those conclusions, we developed a list of recommendations for the Capital Management Branch. Some of these recommendations include:

- Improve web access
- Provide education to users new to the CDG;
- Provide training to stakeholders on new sections/updates to the CDG;
- Include reference material with the CDG, such as a glossary, list of acronyms and an index;
- Provide examples of previous project reports;
- Develop a system for Post Occupancy Evaluations;
- Incorporate a feedback system for the CDG.

These recommendations along with others will serve as the basis for future revisions of the guidelines. As a result, our efforts will make the Capital Development Guidelines more usable and more effective in assisting all stakeholders in proposing and delivering DHS capital projects.

1. Introduction

Many governments use revenue generated from taxes in order to construct and maintain an infrastructure providing health and community services to citizens. These governments typically budget revenue, allocating the amount government agencies may spend within a fiscal year. The government agencies must then use the allocated money to ensure the infrastructure provides enough services to meet an ever-increasing public demand. As such, government agencies must manage their budgets wisely and they must plan and deliver projects requiring large amounts of funding (e.g., hospitals and nursing homes) on time and without cost overruns. If inefficiencies exist within the project planning and delivery process, the government wastes money and concurrently fails to provide the maximum level of services the public demands and expects.

The state of Victoria, Australia, commissioned its Department of Human Services (DHS) to manage its health and community services infrastructure. Within the DHS, the Capital Management Branch (CMB) assumes responsibility for capital works projects that aim to expand and enhance the health and community services infrastructure through the construction and upkeep of hospitals, clinics, juvenile justice centres, aged-care centres, and mental health facilities. As a result, the CMB must ensure that the planning, design, construction, and implementation of projects occur on time and on budget.

To facilitate this, the Capital Management Branch (CMB) of the Department of Human Services (DHS) in Victoria developed a guideline series, called the Capital Development Guidelines (CDG), to provide a set of rules and regulations for capital construction projects. Designed originally with A\$5,000,000 to A\$30,000,000 statefunded hospital projects in mind, those being the CMB's only clientele at the time, the CDG effectively ensured the CMB completed projects on time and on cost much of the time.

Since the creation of the guidelines, the DHS has changed the CMB's project scope. As of early 2004, the CMB presides over projects funded by both the state and private sources with costs ranging from less than A\$1,000,000 to far over A\$350,000,000. The CMB also now manages projects other than hospitals, including nursing homes, juvenile justice centres, and community centres. Quite simply, the guidelines now apply to a much larger and broader range of projects than originally designed. The CMB does not know what current problems, if any, the stakeholders have in using the guidelines and thus how the CMB can improve the guidelines to achieve their goals. There has never existed any official system for users of the guidelines to provide their feedback to the CMB.

Through our own research on similar systems of capital management guidelines, we discovered that a similar organisation in the U.K., National Health Services Estates (NHS Estates), has a similar set of guidelines. However, upon comparison, we found that there exist key differences between the CMB's system and the NHS Estates' system. Besides providing guidelines on topics the CDG do not cover, such as post-project evaluation, the NHS Estates provide an education program for contractors to familiarize themselves with the project process so that they can more efficiently participate in government projects.

While the guidelines have existed for over five years, the CMB has never sought to assess and measure the level of effectiveness and user satisfaction with the Capital Development Guidelines. With little to no extra resources, the CMB could not launch an official audit of the guidelines and their usage. The Capital Management Branch staff did not know how users access the guidelines or get assistance using the guidelines. The CMB also did not know users' thoughts concerning the presentation of the guidelines and whether there existed a need for more information within the guidelines covering new procurement systems and low-cost (<A\$10,000,000) projects. Since the birth of the CDG, the CMB has never had proper resources to officially launch, maintain, and audit the guidelines.

This project aimed to act as the first official CMB sponsored CDG audit with the focus upon gathering user feedback. Through interviewing agencies, consultants, and project managers we sought to capture anecdotal data on their experiences using the guideline series focusing on the key issues we identified. Since interviews took a lot of time and we only accomplished a few, we also developed and conducted a web survey of 236 stakeholders involved in the proposal and delivery of DHS capital projects. The web survey focused less upon anecdotal data and more upon respondents' opinions on proposed changes to the CDG series, such as the creation of an education program, providing new sections on new procurement strategies, and improving access to the information within the guidelines.

Based on an analysis of the results of our research, we provided the CMB with recommendations for improving the guidelines. Our recommendations will serve as the basis for future revisions of the guidelines. As a result, our efforts will make the Capital Development Guidelines more usable and more effective in assisting agencies and consultants in proposing and delivering DHS capital projects.

2. Background

In this chapter we will present the history of the CMB guideline series and a discussion of similar systems in place around Australia and the UK. The history of the Capital Development Guidelines, from the purpose of their creation to the reason for their many changes, casts a spotlight on the significance of this project and current state of the guidelines. For specific topics with capital project planning and delivery, NHS Estates and Queensland provide easy to digest examples of how the CMB could possibly perform post-project evaluations. Lastly, an example from a government procurement council in New South Wales provides an excellent model for how a guideline document could be supported with training, proper access, user feedback, and specific people to support user inquiries.

2.1 The History of the Capital Development Guidelines

The key to understanding the Capital Development Guidelines lies within their richly detailed history. The guidelines have grown and changed from their original incarnation over the course of the years, shifting and shaping with the changes in state and commonwealth government. The key to understanding the current state of the guideline series and the purpose of this project lies within this very history.

2.1.1 The Formation of the "Project Management" System

Prior to 1992, three different Victorian departments served in the role currently held by DHS, and the CMB existed as the Facilities Management branch of the Health Department, focusing primarily on Hospital construction using public funds. When power shifted in the Commonwealth and the Victorian government, Victoria decided to restructure state departments to reflect the Commonwealth's departmental hierarchy. As a result, Victoria merged the Health Department and the Community Service Department into the Department of Health and Community Services, with the Facilities Management branch following along (Ben Gelnay, personal correspondence, 13 April, 2004).

As this point, the scope of the Facilities Management branch expanded to include responsibility for not only hospital construction, but also the construction of community-care centres and property acquisition for project sites. At roughly the same time, projects began running over budget and over time, and due to political reasons certain projects received funding although other projects had a higher priority. Government also wanted to make its departments act "strategically," involving more stakeholders in planning and delivery of government funded capital projects. To resolve these problems, Barry Paice, now director of CMB, introduced the Project Management system (Ben Gelnay, personal correspondence, 13 April, 2004).

The Project Management system called for the formation of Project Control Groups (PCGs) that would include a member of Facilities Management (now CMB), consultants engaged for the project, the involved agency's CEO, and key stakeholders from senior staff of the agency. The PCGs would act as the main body steering project progress and ensuring that those working on the project met service, design, budget, and time requirements (Ben Gelnay, personal correspondence, 13 April, 2004).

With agency CEO's and agency senior staff now taking an active role in project planning and delivery, a problem arose. The Facilities Management branch asked these people trained as business managers, head nurses, surgeons, and doctors to step out of their realm of knowledge and experience to take part in the world of engineers and government funded construction (Ben Gelnay, personal correspondence, 13 April, 2004). With a diverse group of representatives forming a PCG, sitting around the same table, how could the Facilities Management branch ensure everyone, regardless of background, could communicate and understand the process at hand?

2.1.2 The Creation of the Original Capital Development Guidelines

In an effort to educate those sitting on the PCG with no experience with capital development (e.g. primarily the agencies), the Facilities Management branch wrote guidelines explaining in layperson's terms the process of planning and delivering capital projects. Barry Paice and Ben Gelnay, who has the responsibility for the maintenance and upkeep of the CDG, chose to avoid what Gelnay referred to as "death by volume" by publishing the guideline documents in short, small sections. They also chose to provide the general non-technical information in the beginning of the sections and attaching the more technical details as appendices to avoid confusion from PCG members who did not have the relevant background to digest the technical portions properly. Around 1994, these guideline sections became the first incarnation of the Capital Development Guidelines, intending to assist stakeholders effectively in planning and delivering major capital projects in the A\$2-30 million price range (Ben Gelnay, personal correspondence, 13 April, 2004).

Government policy, however, did not remain stagnant. During the development and even after the original implementation of the first guideline series, policy changes significantly affected the tendering and contracting of projects, with government passing new regulations and creating new funding mechanisms. Changes such as asbestos regulations and private sector financing made the guidelines out of date quickly. Over the years, these changes to policy and updates to the guidelines have occurred many times (Ben Gelnay, personal correspondence, 13 April, 2004).

2.2 The Current Capital Development Guidelines

From examining the guidelines' history, we discovered much has changed since their creation. They have effectively taken a complex system of planning, designing, procuring, constructing, and implementing projects and laid out a framework from which to work. As will be seen from the results of our interviews later on in Chapter 4, the DHS, agencies, and contractors agree: The CDG do work. However, do they work as well as they could?

2.2.1 The "Cruft" Within of the Guidelines

Over time, the Capital Development Guidelines have grown to encompass the planning and delivery of a wide range of facilities. Developing standards and guidelines to assist users with new project types helps maintain a level of management ensuring effective planning and delivery, but simply adding the information directly into the guidelines without taking the time to remove any potential redundancies or contradictions can hinder the desired outcome. The redundant and superseded portions, called "cruft" (Raymond, 2000), led to inefficiencies in the workings of a system, or in this case, the use of the guidelines.

Forms of cruft exist throughout the guideline series. The Business Plan section exists as the most glaring example. According to Randal Garnham of the CMB, in his time with the CMB he has yet to see a Business Plan (Randal Garnham, personal correspondence, March 2004). With newer guidelines in effect, some have superseded older guidelines. Yet, the older, now closer to irrelevant, guidelines remain a part of the series that users must wade through to find information.

2.2.2 CDG Upkeep

Since the creation of the CDG, the CMB has yet to implement an official standard maintenance program to routinely update the guidelines with new practices and remove outdated and redundant information. Within the last two years, the Victorian Department of Treasury and Finance has released documentation on new procurement methods available to fund DHS capital projects, and they have released documentation on their new Gateway Reviews. However, the current guideline series does not reflect these new practices of project auditing and funding, both of critical importance to agencies and consultants involved with the planning and delivery of DHS capital projects.

Typically, CMB project managers and asset managers would take time from their primary tasks and write drafts of new sections or additions covering new information, such as the Gateway Reviews. As a secondary job function, these managers typically cannot complete the task as quickly as would someone taking primary responsibility for such a task. In addition, typically the author would write the new material from the standpoint that would benefit those who share his/her job function, reducing the chance that a stakeholder from an agency could understand the material. Writing anything for a broad audience with different levels of knowledge poses the problem of leaving some at a disadvantage.

2.3 Case Studies of Similar Systems

In order to choose which issues within the Capital Development Guidelines to address, we researched systems similar to that of the DHS and CMB. We found a similar system in nearby Queensland, which has a public works department that follows a similar set of guidelines. In the United Kingdom, the National Health Services Estates department performs a very similar role to that of the CMB, managing various health projects through the use of written guidelines. We will now discuss these three systems.

2.3.1 Queensland

In the state of Queensland, Australia, the Department of Public Works of the Queensland Government manages the state's capital projects. This department has a similar role to the CMB of Victoria, Australia, but operates on a broader range, regulating the construction of all public facilities. To ensure that projects meet the service needs required in a cost effective manner, the Department of Public Works of the Queensland Government developed the Strategic Asset Management (SAM) Guidelines (Department of Public Works, 2002c). Similar to the CDG, the SAM guidelines provide the framework that a capital project must follow from start to finish. The following section will highlight some of the key characteristics that the Queensland Government utilizes in their guidelines that the CDG does not contain.

2.3.1.1 Post Occupancy Evaluation

The SAM Guidelines of Queensland define a structured approach, called Post Occupancy Evaluation (POE), for the evaluation of the performance of a new or existing facility once it is fully operational, after at least 12 months of occupancy (Department of Public Works, 2002d). The POE attempts to:

- Assess the suitability of the facility to meet the original objectives;
- Assist in the continuous improvement in the planning process;
- Improve deficiencies by improving maintenance, minor works and management decisions.

Implementing a POE results in more functional facilities that better serve the original objectives. Some additional benefits of a POE include (Department of Public Works, 2002d):

- Improved project briefing that promotes increased functionality and cost effectiveness;
- Improved building management that identifies maintenance and other recurrent costs
- Improved operational processes that better services client needs.

By performing a POE, the Queensland Government has the opportunity of gaining knowledge to improve future facilities by eliminating repetition of deficiencies in previously built facilities.

The focus of the POE varies between projects, but generally includes evaluation of the process, value and costs, risk management, suitability, utilization, performance, and physical condition. The results of a POE include both positive and negative feedback, so that future capital projects will benefit. At the completion of the evaluation, the POE team submits a report including the methodology used, findings, recommendations, and action plans.

2.3.1.2 Additional Aspects of Queensland's Guidelines

Along with the POE, there are other aspects of the SAM Guidelines that are absent in the CDG. The Department of Public Works of the Queensland Government provides an online feedback form for the SAM Guidelines (Figure 2.1). Similar to the POE, the feedback form provides data to improve the guidelines, asking only one free response question, "How do you think the SAM Guidelines could be improved?" In addition to the free response question, it also asks other questions regarding how users access the guidelines and some other statistical information. By providing this simple online feedback form, it allows the users of the SAM Guidelines to express their opinions on the guidelines whenever an issue arises (Department of Public Works, 2002a).

FEEDBACK FORM	
AGENCY: CONTACT OFFICER: PHONE NUMBER: FAX NUMBER: E-MAIL:	
Please select what areas of asset management come under your control.	 Asset Planning Capital Works Maintenance Property Management
Do you regularly use the SAM Guidelines?	오 Yes 🔘 No
Do you find the SAM Guidelines useful?	오 Yes 🔍 No
How do you think the SAM Guidelines could be improved?	A V
What format is better suited to your business?	🔍 Internet 🔍 Hard Copy
Submit Reset	

Figure 2.1: Feedback Form

In addition to the online feedback form, Queensland Public Works also distributes the feedback form at face-to-face forums and receive better results (Maree Morgan, personal correspondence, April 2004). In speaking with Maree Morgan of the Department of Public Works Market Researching, we were also informed that the Building Division conducts a formal costumer satisfaction survey every two years with face-to-face interviews and telephone interviews. This is just another example of how the Department of Public Works is seeking costumer feedback on their guidelines.

The SAM Guidelines also include a reference section to aid the reader in finding and comprehending information, which is something the CDG do not have. The first reference section includes a glossary with over 150 terms (Department of Public Works, 2002b). By including a glossary, users unfamiliar with the terms used in the guidelines will have a quick reference to any difficult terms they may encounter. A list of 48 acronyms complements the glossary, acting as a quick reference for those who are unfamiliar with the SAM Guidelines, instead of having to search elsewhere in the guidelines to find what the acronym represents.

The Queensland Government, in an effort to educate users, provides one-day seminars (Department of Public Works, 2002e). The seminars familiarise the users with the current guidelines, policies and procedures. The use of the seminars also allows the opportunity for users to raise questions regarding the guidelines and particular issues that those running the seminar can address, educating not only the users of the guidelines, but also the government agency. Currently, CMB does not offer any seminars to educate users.

2.3.2 The NSW Government Procurement Council

The state of New South Wales established the NSW Government Procurement Council (GPC) in December 2001 to accelerate procurement reform (GPC, 2003, p. 6). Released in March 2002, the GPC Smarter Buying for Government strategy attempted to improve government agency procurement through a series of guidelines called the Procurement Plans 2003-04 Guidelines (PPG) (GPC, 2003, p. 6). By Friday, 29 August 2003, all New South Wales government agencies had to submit procurement plans as outlined within the PPG (GPC, 2003, p. 4). Akin to the Capital Development Guidelines, users had to understand the procedure outlined within the PPG and have access to the documents in order to accomplish the requirement. On closer inspection of the PPG, they embody important key features missing from the CDG.

2.3.2.1 Training Users on how to Use the PPG

When government develops new rules for agencies to follow, government must inform and educate its agencies on the new practices. Introducing new rules and regulations poses a potential threat of temporary inefficiencies in government functions as the understanding of the new policies propagates. Administering training or educational programs encourages and fosters this propagation of knowledge. In the case of NSW GPC, the GPC conducted workshops to assist government agencies in producing sufficient procurement plans under the new Procurement Plan Guidelines.

The GPC held four workshops in June 2003 in Sydney for those preparing a procurement plan for their agency based on the PPG. The first workshop, held 17 June, acted specifically as a new-user induction program for any agencies that had no experience preparing a procurement plan. The GPC published their announcement of the workshops within the PPG, including schedules and locations of the workshops. Included at the end of the workshop section, a contact number is listed by the GPC for those who required more information and wished to make reservations for the workshops (GPC, 2003, p. 9).

Currently, the CMB does not hold regular workshops for stakeholders involved in the process. The primary form of education for stakeholders comes from the CMB member sitting on the PCG with them. CMB originally intended for users to be educated in this manner, but the need for change may exist (Ben Gelnay, personal correspondence, 13 April 2004).

2.3.2.2 How the GPC Receives Feedback

In an effort at self-improvement, the GPC actively sought feedback in the form of suggestions and comments from users of the PPG. According to the GPC, the feedback provided will shape future incarnations of the PPG and possibly other programs. The GPC used two different methods for capturing user feedback on the process outlined in the PPG and the content of the PPG.

The first method, and possibly the most accessible to users, came in the form of a questionnaire built into the PPG document. At five pages long, the questionnaire consists of ten questions and a repeat of the address to mail to once complete. The first nine questions attempt to assess the effectiveness of the workshops and the helpfulness and clarity of the PPG sections. Focusing on aspects such as the effectiveness of the workshops (training), the clarity of the guidelines (presentation), the availability of the PPG (access), and the comprehensiveness of the PPG (content), the questionnaire possessed all four key aspects.

Although the effectiveness of the GPC's feedback methods remains unknown, the CMB might consider taking a lesson from the GPC. Currently, CMB does not have any mechanism for feedback from the stakeholders using the guidelines or involved in the project planning and delivery process. Determining if the need for this exists amongst the stakeholders can provide possibilities for improvement within the CMB.

2.3.2.3 Providing Quick Access to Assistance with the PPG

While the PPG consists of roughly thirty pages, rather short compared to the CDG series, the PPG provides readers with a five-page glossary of 36 terms (GPC, 2003, pp. 20-24). Within the document, readers can easily refer to the glossary to understand more clearly terms and phrases used throughout the PPG. The GPC website also hosts a more detailed on-line version of the glossary providing readers with links, within each definition, and to other websites containing more in depth information.

Also on the GPC website, users have access to a Frequently Asked Questions (FAQ) page to assist them in understanding the process outlined within the PPG. Broken into four sections, the FAQ covers common questions about the GPC, the act of preparing procurement plans, how to submit plans, and how to assess procurement plans (GPC, 2004). Although not mentioned within the PPG documents, the FAQ may have assists users in their efforts to develop procurement plans according to the guidelines.

Besides the self-assistance provided through the glossary and FAQ, the GPC provided two persons designated to assist users with difficulties and field questions. The GPC listed the contact information for the people within the guideline documents, which instructed users to contact the two designees for clarification and advice (GPC, 2003, p. 10). By knowing where to turn to for help, inexperienced users of the PPG have an advantage over inexperienced users of the CDG.

When stakeholders come across problems or issues that require assistance, they usually contact the CMB. However, unlike the GPC, CMB does not provide specific names of people to contact. CMB planned this intentionally as the CMB representative on the PCG or the CMB project manager would typically field such inquiries (Ben Gelnay, personal correspondence, 13 April, 2004).

2.3.3 NHS Estates

The National Health Services (NHS) Estates, an executive agency of the Department of Health (DOH) in the United Kingdom, takes responsibility for running the public sector estate and management services. The agency has various local offices that meet the needs of local regions and facility management, from planning a new health care facility to the modernization of clinical services. The NHS Estates focuses mainly on health services (NHS, 2003).

The NHS Estates calls their guidelines for capital project development the Capital Investment Manual (CIM), which those involved with planning and delivering NHS Estates' supervised projects must follow. The CIM provides detailed guidelines for each part of a project's planning and delivery. The NHS uses a project manager to act as the link between the contractors and the National Health Services Trust Board (NHS, 2003).

2.3.3.1 The NHS Process Overview

The process of delivery of the project goes through six different stages. Between the first two stages, the Full Business Case Leading to Approval stage and the Design stage, the NHS Regional and Central offices, along with the Treasury Department, must approve the proposal before the design of the project may begin. Before moving from the Design to the Tender and Contract stage, the NHS Central ensures that the design follows the standards required by the NHS. During the Tender and Contract stage, the NHS Estates tenders the projects and accepts bids, eventually selecting a contractor based upon a balance between experience and cost. In the Construction and Equipment Supply stage, the contractor performs and completes the construction of the facility to the design specified. In the last two stages, Technical Commissioning and Handover stage and Post Completion stage, the NHS Estates inspects the final product by examining the outcome based upon the plan originally developed as part of the Business Case. A detailed explanation of each stage is give below (NHS, 2003):

- Full Business Case Leading to Approval: In this stage, preliminary work is completed including the outline of the design, costs, risk assessment, and investigation of the project site. Contracts, policies and accommodation schedules, and strategy for procurement of equipment are also prepared. At this point, NHS Estates Regional Office and Treasury Approval are required to go to the next stage.
- **Design**: In this stage, the design is finalized into drawings and specifications. In addition, bid documents are finalized in accordance with the procurement strategy used earlier in the first stage. A pre-tender estimate is prepared for the general contractor. Treasury re-approval may be required, depending on the project, to advance to the next stage.

- **Tender and Contract**: In this stage, a tender list is prepared, and the most appropriate tender is awarded the contract.
- Construction and Equipment Supply: In this stage, construction is completed. Throughout the construction process, the project manager is required to submit monthly reports to the NHS Estates on project progress, records kept on site visits, and updated cost estimates of the project. The Design team is responsible of approving the design decision made by the contractors.
- Technical Commissioning and Handover: In this stage, a commissioning team responsible for inspecting and testing the final product is assembled. They evaluate the quality of work, completeness, and performance of the project. NHS issues a Certificate of Practical and Completion upon the completion of this stage.
- **Post Completion**: In this stage, all the claims are settled. Any defects are corrected, and all the documents are returned to the Trust.

A summary of this process is shown in Figure 2.2.

National Health Services

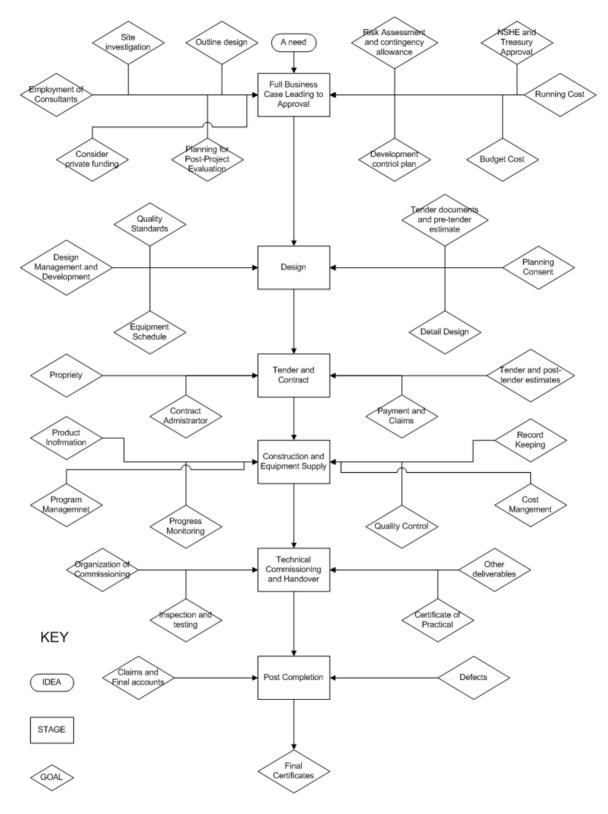


Figure 2.2: NHSE Project Delivery Process (NHS, 2004)

2.3.3.2 The Post-project Evaluation Process

If a completed project's cost exceeds \pounds 1,000,000, the NHS Estates forces the project to undergo the three-stage Post-project Evaluation (PPE) process. (However, any project may undergo the PPE at the discretion of the trust.) Performing a PPE aims to "improve project appraisal, design, management, and implementation" (NHS Executive, 1995, p. 3). The Post-project Evaluation serves as a form of education for everyone involved in the delivery of the projects, not as a means of placing blame on a specific person or group involved.

The first stage of the Post-project Evaluation process pertains to developing an evaluation to custom fit the project in question. The project evaluation manager, designated during the Full Business Case stage, assumes responsibility for performing the evaluation. In this first stage, the project evaluation manager develops a "project framework" which clearly lists the project's intended and actual outcomes. The contrast between the originally proposed outcomes and the actual outcomes serves as the basis for the PPE (NHS Executive, 1995, pp. 4-6).

The second stage aims to answer key questions concerning the results of the project. These answers serve as the main indicators of the existence of problems in the project's delivery. Examples of such questions are (NHS Executive, 1995, p. 7):

- Was the project completed on time? If not, why?
- Was the project completed within budget? If not, why?
- Does the result of the project suit its desired function?

The third and final stage evaluates the quality of the service of the resultant facility and analyses the results of the second stage. One of the most important questions that stage three attempts to answer is: What if the project had not been undertaken? The third stage tries to see if the project was worth doing (NHS Executive, 1995, pp. 8-9).

After completing the three stages, the project evaluation manager gives copies of the evaluation results to the National Health Service Executive department and Her Majesty's Treasury department. The project evaluation manager also files a copy with the NHS Estates for future project managers to reference. With past project evaluations readily available to project managers, the Post-project Evaluation process serves its educational goal.

2.3.3.3 CIM Education

A report titled "Rethinking Construction" by Sir John Egan (1998), currently President of the Confederation of British Industry, made recommendations to the United Kingdom after examining the clients' level of satisfaction in respect to the construction industry. As a result, NHS Estates launched NHS ProCure21. By enrolling in this program, the contractors receive immediate assistance to understand the guidelines, one of the main purposes of NHS ProCure21. This program works "to improve the performance of public sector clients in capital procurement (NHS, 2003)," allowing the contractors to sufficiently understand the whole process.

2.3.3.4 Key Aspects of the NHS Estates System

The National Health Services Estates department has and implements a postproject evaluation system. As a result, the NHSE has the possibility of improving their Capital Investment Manual and their capital management system through constant feedback from project evaluation managers. Future project managers have ready access to the feedback from the NHSE's Post-project Evaluation process, serving as an educational tool. Capital Management Branch of DHS has an unofficial, undocumented post-project evaluation system, but they do not implement it (Judith Hemsworth, personal communication, 5 February, 2004). The NHSE system provides an excellent example of user education. Through the ProCure21 program, contractors that must follow the Capital Investment Manual receive education in the CIM's procedures. Project managers can educate themselves through researching past feedback on similar projects. The Capital Management Branch does not currently have a system to educate the stakeholders in the use of the Capital Development Guidelines.

3. Methodology

The main goal of this project was to enhance the Capital Management Branch's Capital Development Guidelines, making the task of taking a capital project from start to finish easier for the stakeholders. The main issues we developed in the background chapter served as the basis for developing our methodology. The first part of the methodology aimed to use interviews to find opinions of stakeholders concerning potential problems with the guidelines. The second part of the methodology used a web survey with the aim of gathering additional feedback to complement the data from interviews. Appendix J has the complete timeline of our project. This chapter will present and justify our choices in methods.

3.1 Stakeholder Opinions

In order to uncover possible problems with the CDG, we sought feedback from the stakeholders. For who these stakeholders were and how they were identified, refer to section 3.2. This section addresses the two methods we chose to gather feedback: interviews and a survey. The interviews, although time consuming, formed the foundation for our data collection as they provided us with the most detailed feedback compared to the survey.

3.1.1 Interviews

To obtain useful feedback on the Capital Development Guidelines, we conducted numerous semi-structured interviews. We chose to conduct these interviews because they allowed us to obtain in-depth information on the stakeholder's opinions of the Capital Development Guidelines. The interviews also allowed us to investigate deeper into any issues that arose while interviewing and allowed us to vary the interview for different types of stakeholders (i.e. DHS regional staff, DHS Program staff, agencies, and consultants).

Through interviewing a variety of stakeholders from the list we created (section 3.2), we acquired detailed opinions from all areas of project delivery. We focused our interviews on the access, content, education and presentation of the CDG. We have provided the interview protocol in Appendix A. The objective of conducting the interviews was to pinpoint specific problems that stakeholders experienced with the CDG in those specific focus areas.

We interviewed 28 stakeholders covering the State of Victoria. We visited 12 consultants and 5 agencies, within and around Melbourne, to conduct interviews. All of our interviews were face-to-face interview. When agreed upon by the interviewees, we audio recorded the conversations ensuring that we did not miss even minor details in the interview process.

3.1.2 Survey

We could only conduct a limited number of interviews due to our timeframe of seven weeks in Australia, therefore, we used a survey to try to get a broader range of opinions and perspectives. By interviewing IT Staff of DHS as well as Sarah Bending, who had previously done a survey for CMB, we came to a conclusion that a web-survey would best fit our needs.

Using a web survey, we aimed to collect a large amount of information in our short timeframe. The focus of the survey questionnaire mimicked that of the interviews: to obtain feedback on the CDG's presentation, ease of access and content, and on any education or lack there of that occurred on the CDG. We developed and implemented the survey using a special DHS IT solution called eForms (see Appendix B). Hosted on the DHS website, those outside of the DHS and those inside could both access the web

survey.

Guidelines Education and Assistance

★ 1. If and when you don't understand something within the guidelines, whom do you typically seek assistance and clarification from?
○ Colleagues ○ Supervisor ○ CMB Project Manager ○ Nobody ○ Other
If Other, please specify:
★ 2. What would be your preferred method for accessing the information you require to plan and deliver DH projects?
OReferencing hard copy guideline document OOn-line access to easily navigable information
O Education/Training O Using checklists of key activities and requirements
O Other
If Other, please specify:
3. If you prefer to receive education/training, how would you prefer to receive that education/training?
O Workshop/induction program for stakeholders new to DHS capital project planning and delivery
O Irregular workshops addressing changes that effect DHS capital project planning and delivery
O Regular workshops/training on components of DHS capital project planning and delivery
() Other
If Other, please specify:

Figure 3.1: Sample Page from Web Survey

Once we completed our questionnaire design (Figure 3.1), we pre-tested it within the CMB office. We hoped to locate any problems with wording, format, or technical issues that may have existed with the questionnaire. Using feedback from the CMB staff, we made the necessary changes before posted out the finalized questionnaire on the web (Appendix C).

Since our contact list contained only a limited number of email addresses, we decided to employ snowball sampling of all contacts we acquired through the CMB and the interviewees. This allowed us to gather many more responses than we would have

using a survey. Email notifications of our survey were sent out to inform the stakeholders of who we were and what we were doing (Appendix D).

After any stakeholder submitted his/her questionnaires, the DHS web server instantly sent us a notification for our tracking records. For those who did not respond after a week, we contacted them using two follow-up email reminders in order to achieve a higher response rate. The DHS web server automatically updated a delimited text file with the results of all the questionnaires, which we later imported into Microsoft Excel for data analysis.

3.2 Selecting Stakeholders for Feedback

To represent the opinions of all the stakeholders, we had to carefully pick and choose both interview and survey candidates, covering all project types (metro health, rural health, aged care, etc.), capital size, and type of stakeholder (consultant, CMB project mangers, DHS Program, regional staff, and agency staff). Since we were looking for non-probability sample, we wanted to get as many contacts as possible. However, the lack of contact information for stakeholders became one of our first problems. We had to contact many CMB project mangers and ask them to give us contact information. This was a long and tedious process. Following two sections explain how we selected candidates for interview and survey.

3.2.1 Interview Candidates

The CMB initially gave us only a list of DHS funded projects with their stated costs. From that list, we selected 28 projects covering all project types (metro health, rural health, aged care, etc.) and then we separated project cost levels (less than \$10 million and greater than \$10 million) to ensure that we covered the whole range of capital projects. We wanted to get feedback from low cost projects (less than \$10 million) and projects that were more costly to find out how the capital size affects the

project delivery, in all project types. Figures 3.2a and 3.2b give examples of two distinctly different projects that are covered by the Capital Development Guidelines. The picture in Figure 3.2a shows a Community Residential Unit project costing well less than A\$5 million, while Figure 3.2b shows a Major Metro Hospital Project costing well over A\$100 million.



Figure 3.2a:Low-Cost Project Facility



Figure 3.2b: High-Cost Project Facility

We then researched each individual project, locating and contacting the project managers. We asked them for various stakeholder contact information for the individual projects. These stakeholders were CMB project managers, DHS program, regional staff, agency staff, and consultants (principal consultants, architects, quantity surveyors and engineers). We chose such a wide variety of stakeholders to ensure that the data we collected represented all areas of project delivery.

After gathering all the contact information, our liaison approved 49 candidates that we could interview. There were 15 consultants, 14 health agencies, 12 DHS program, and rest were DHS regional staff. Most of the consultants were involved with numerous projects, covering many project types and a wide range of capital sizes, which reduced the number of interviews we would have had to conduct. However, due to our short time in Australia, we were able to interview 24 out of the 49 candidates. Out of 24 interviewees, 7 were consultants, 5 were agency staff, and 12 were DHS program staff. In addition to these 24 candidates, we also interviewed four CMB project mangers, recommended by our liaison.

3.2.2 Survey Candidates

For our survey candidates, we used a list that had been compiled by a CMB Environmental Officer, Sarah Bending, for her survey that had been done a year previous to ours. A major task was to update the list because it was a year old and lacked some information (email addresses, telephone numbers, etc.). After filling in most of the missing information, our liaison approved 229 contacts we could use for our survey. There were 101 consultants, 124 agencies, and the rest were DHS regional staff. In addition to these 229 survey candidates, we also invited 7 CMB project managers to take our survey.

4. Results and Analysis

The goal of our project was to obtain feedback on the CDG focusing on the access, presentation, and content of the guidelines as well as feedback on user education on the DHS capital planning and delivery process. Our main objective in performing the interviews was to get in-depth responses to the four areas mentioned above. The interview summaries can be found in Appendix E, along with the content analysis by type of stakeholder. We also conducted a web survey to complement the information we obtained from the interviews.

4.1 Sources of Feedback

With both the interviews and the survey, we aimed to obtain feedback from a variety of stakeholders. Before presenting our results, we want to describe the types of stakeholders from whom we obtained our information for both the survey and the interviews. Following that, we will present and analyse our results.

4.1.1 Survey Demographics

For our survey we invited 236 stakeholders to take part, and received 57 questionnaires back, equivalent to a response rate of 24.4%. Figures 4.1a and 4.1b show the number of stakeholders we invited from each stakeholder category and the number of responses we received from each.

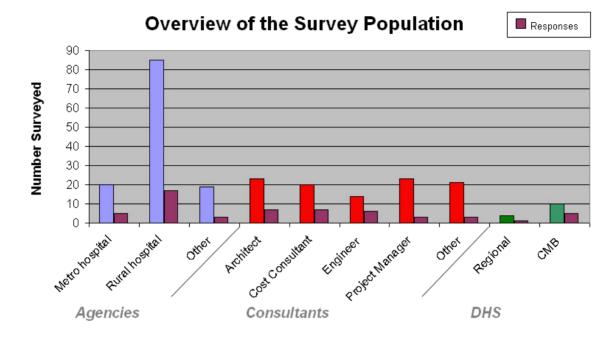
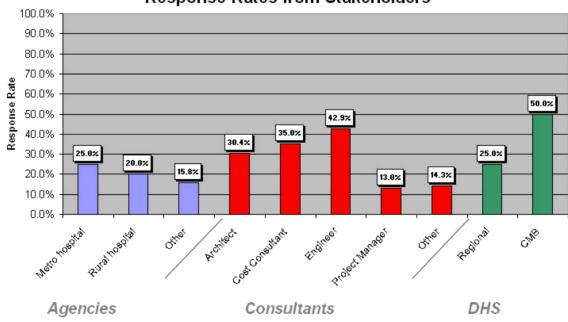


Figure 4.1a: Overview of the Survey Population



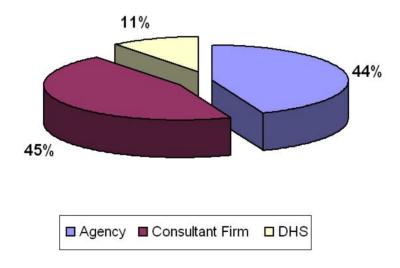
Response Rates from Stakeholders

Figure 4.1b: Response Rates from Stakeholders

We obtained feedback from all categories of stakeholders surveyed, but with varying response rates; however, Figure 4.1a demonstrates that the majority of the survey population consists of consultants and agencies (94%). The number of questionnaires

sent to rural hospitals appears abnormally high relative to other stakeholder types because we combined the responses from residential aged care with the rural hospital responses. We adjusted the stakeholder categories because a large number of those respondents had faxed back the questionnaires, and checked off both rural hospital and residential aged care. The online version of the survey only allowed for one choice of response.

The first section of the questionnaire survey, aimed to obtain feedback on the demographic information. Figure 4.2 displays the results of the demographic section of the questionnaire.



Survey Consultant Distribution

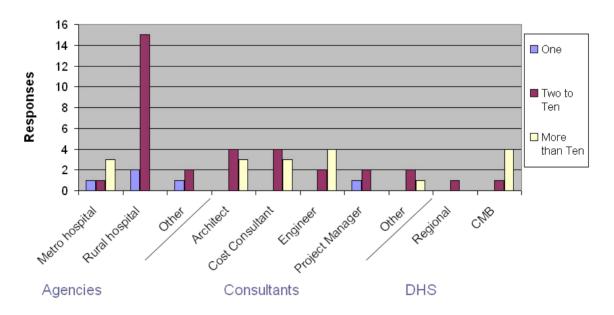
Figure 4.2: Survey Distribution

The majority of our survey results came from the agency staff and consultants, while we received fewer responses from the DHS Regional Staff and CMB project mangers. This corresponds to the population we surveyed, consisting of mostly agency staff and consultants.



Figure 4.3: Surveyed Stakeholder Project Experience

We also received feedback from stakeholders with different project experience, displayed in Figure 4.3. The majority of respondents (59%) posses experience from two to ten projects in the last five years, while only a handful of respondents show only a single project worth of experience. Figure 4.4 below displays a more detailed analysis of stakeholders' experience.



Stakeholder Project Experience (Last 5 Years)

Figure 4.4: Stakeholder Project Experience

As illustrated by Figure 4.4, nearly all stakeholders (91%) have had at least two previous project experiences in the last five years, especially the consultants. The majority of the stakeholders with one-time experience come from the agency staff.

The third question in the demographic section of the questionnaire aimed to find the capital size of projects the stakeholders were involved.

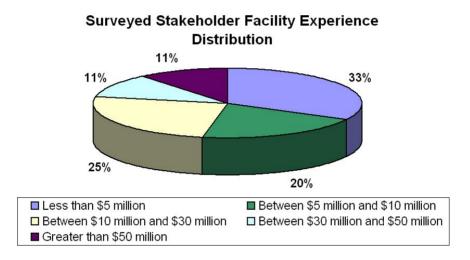
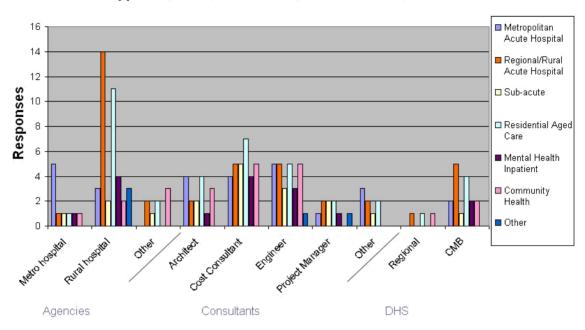


Figure 4.5: Surveyed Stakeholder Facility Experience Distribution

Figure 4.5 demonstrates that the responding population consist of stakeholders involved with all levels of project size. Stakeholders with low-cost project experience, having a capital size less then A\$10 million, formed the majority (53%) of the responding population. Stakeholders experienced with projects having a capital cost greater then A\$30 million had a response rate of only 22% of the responding population.

The final question in our demographic section aimed to get an understanding of what types of facilities the respondents have delivered.



Types of Facilities Stakeholders Have Delivered

Figure 4.6: Types of Facilities Stakeholders Have Delivered

Figure 4.6 displays the types of facilities stakeholders had delivered. The agency staff from metro hospitals appears primarily involved with Metropolitan Acute Hospitals, while the agency staff from rural hospitals work with both Regional/Rural Acute Hospitals and Residential Aged Care facilities. The Rural hospital agency responses show a high involvement with Residential Aged Care facilities because we combined the residential aged care agencies and rural hospital agencies results as explained previously. The consultants who responded to our survey, as well as the CMB project mangers, show involvement with all types of facilities. We expected this type of response because consultants and CMB project managers work on any type of project, regardless of facility type.

In order to assure a good representation of the population, we sought to obtain feedback from a wide variety of stakeholders with various levels of project experience. The results from the demographic section of the survey show that it successfully covered a broad range of stakeholders with varying levels of project experience. This encompassing aspect allows for results that may better reflect those opinions of the population of stakeholders as a whole.

4.1.2 Interview Demographics

We conducted 28 interviews with stakeholders representing the CMB project managers, DHS program areas, agency staff, and consultants. Table 4.1 illustrated the distribution of the interviews we conducted.

Interviewed Stakeholder Distribution

Consultants	7
CMB Project Manager	4
Regional Staff	0
Program Staff	12
Agency Staff	5
Total	28

Table 4.1: Interviewed Stakeholder Distribution

As the table indicates, we did not interview DHS Regional staff due to time constraints and scheduling conflicts. As for consultants, we interviewed six engineers and one project manager. The following table shows the distribution of DHS Program staff by program area:

Table 4.2: Distribution of Program Staff Interviewed

Distribution of Program Staff

Rural and Regional Health	3
Disability	3
Juvenile Justice	1
Metro Health and Aged Care	5

The previous table reflects that we interviewed a wide variety of stakeholders within the program staff to obtain feedback. Although our interviews did not cover all possible

types of stakeholders, having been unable to interview DHS regional staff, we covered a broad enough range to get a good representation of opinions on the CDG.

4.2 Access to the Guidelines

As part of our objectives, we sought to determine how stakeholders currently access the information within the guidelines. To achieve the objective, we used the interviews and survey to research if the methods stakeholders currently use suit their needs and if any alternatives exist to provide more efficient and convenient access. The following sections contains the results from questions pertaining to access and their analysis.

4.2.1 Survey Results

We included four questions regarding access to the guidelines in the questionnaire. The first question aimed to establish how respondents became aware of the CDG.

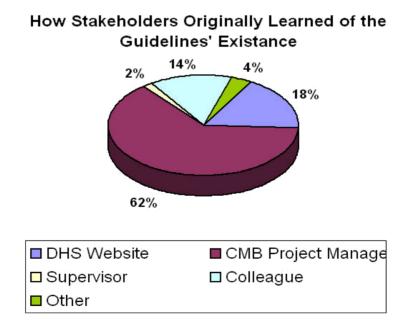


Figure 4.7a: How Stakeholders Originally Learned of the Guidelines' Existance

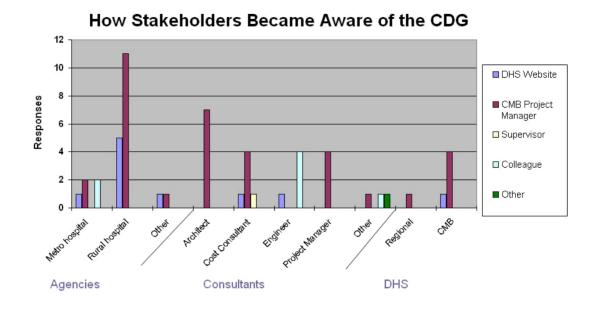


Figure 4.7b: How Stakeholders Became Aware of the CDG

Figures 4.7a and 4.7b show the responses of the question, "How did you originally become aware of the existence of the guidelines?" The overall result shows that the majority (62%) of stakeholders originally became aware of the CDG through the CMB project mangers (see Figure 4.7a). This is true across all types of stakeholders, except the engineers in which 80% of them primarily learned from their colleagues (see Figure 4.7a). If the respondents first learned from the CDG from the CMB project manager, the respondents most likely the respondent did not learn of the guidelines until they got involved in their first capital project, possibly in a Project Control Group meeting.

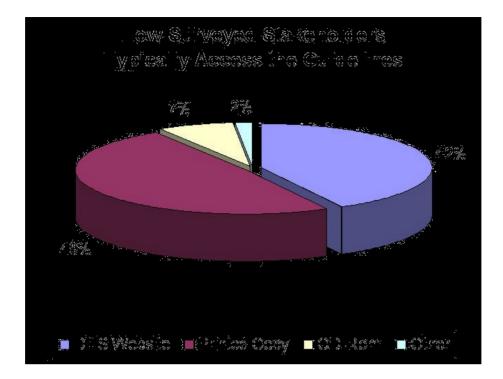
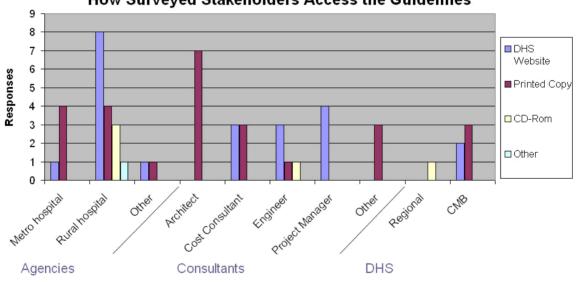


Figure 4.8a: How Surveyed Stakeholders Typically Access the Guidelines



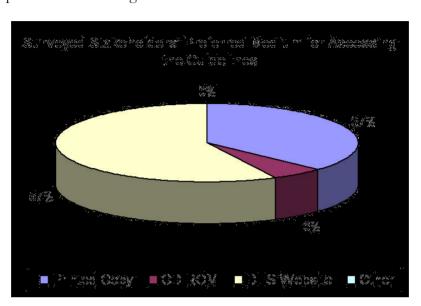
How Surveyed Stakeholders Access the Guidelines

Figure 4.8 b:

The results from Figure 4.8a show that over 90% of the responding stakeholders can access the guidelines when the need arises. However, a small amount of respondents (9%) expressed difficulty in accessing the CDG. For five of the six of those unable to

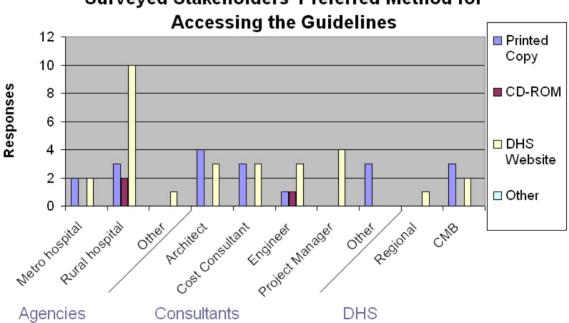
access the CDG when needed, they primarily access the CDG through the DHS Website. The interview results section discusses this issue further (see section 4.2.2).

The final question of the Access Section to our questionnaire asked users how



they would prefer to access the guidelines.

Figure 4.9a: Surveyed Stakeholders' Preferred Medium for Accessing the Guidelines



Surveyed Stakeholders' Preferred Method for

Figure 4.9b: Surveyed Stakeholders Preferred Method for Accessing the Guidelines

Figures 4.9a and 4.9b show that the majority of the responding stakeholders would prefer to access the CDG via the web. However, a significant portion (37%) of the population prefers to access the CDG using the printed copies.

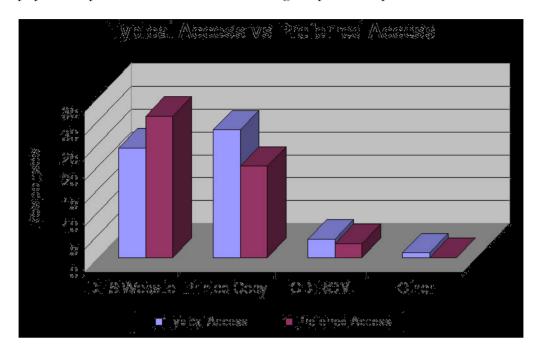


Figure 4.10: Typical Access versus Preferred Access

Figure 4.10 displays the typical method versus the preferred method of access to the CDG. While stakeholders typically access the CDG through using both the web and hard copies, 20% of respondents prefer to access the CDG through the DHS Website. Looking at the raw data, we found that seven respondents who used hard copies and two of those who used CD-ROM would actually prefer to use the DHS Website to access the CDG. Only one person who used the DHS Website preferred another method, that of using a CD-ROM. Overall, the responses show a relatively low demand for future CD-ROM versions of the CDG.

4.2.2 Interview Results on Access

In our interviews, we asked the stakeholders several questions on how they typically access the guidelines and the effectiveness of their access method. The following section contains the results of the interviews pertaining to access. Appendix E contains summaries of the interviews along with content analysis by type of stakeholder.

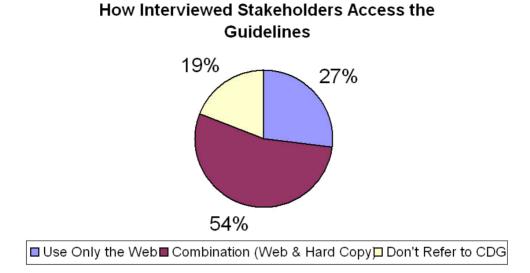


Figure 4.11a: How Interviewed Stakeholders Access the Guidelines

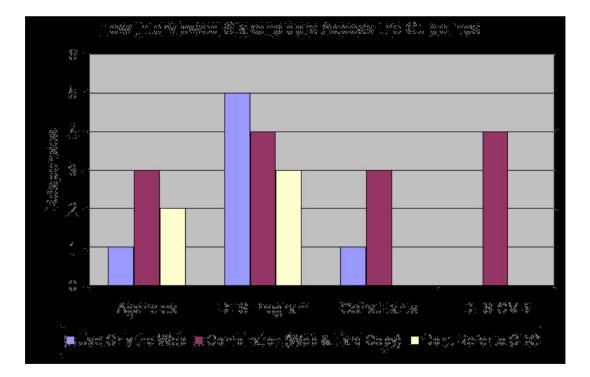


Figure 4.11b: How Interviewed Stakeholders Access the Guidelines

Figures 4.11a and 4.11b, show the results of how the interviewed stakeholders typically access the guidelines. With respect to the other two types of responses, a significant number (54%) of the stakeholders interviewed, access the guidelines through the web as well as from a hard copy. In addition, outside of DHS Program staff, the number of interviewed stakeholders using a combination of web and hardcopy is higher than other types of responses. In addition, more DHS Program stakeholders use only the web to access the CDG than do all other stakeholder types combined. This could because they could access through the DHS intranet, which others cannot access. Only those within DHS offices can access the DHS intranet.

Most (54%) of the interviewed stakeholders that use a combination of web and hardcopies said they use the web for some sections of the guidelines and hard copies for other sections. One of the CMB project managers said that he uses the web to get the most up-to-date version of the guidelines.

Three DHS Program and two Agency stakeholders claim not to access the guidelines at all. One of the DHS Program stakeholders said that his particular job does not require him to access the guidelines. Both of the agency stakeholders said that they rely on the DHS Program project manager take responsibility for anything required by the CDG.

We also asked the stakeholders whether they had any difficulties accessing the guidelines through the web. Figures 4.12a and 4.12b show the responses by stakeholder type and all the responses combined.

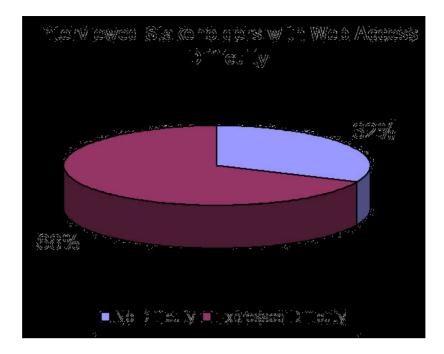
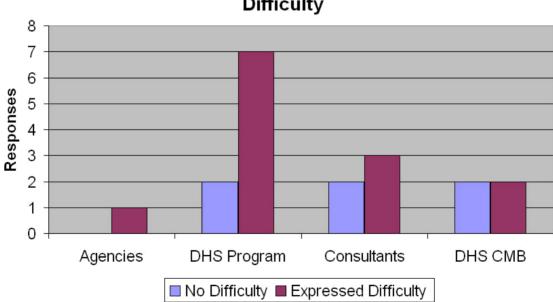


Figure 4.12a: Interviewed Stakeholders with Web Access Difficulty



Interviewed Stakeholders with Web Access Difficulty

Figure 4.12b: Interviewed Stakeholders with Web Access Difficulty

The majority (62%) of the stakeholders expressed that they experience difficulties in accessing the CDG through the web. All four types of stakeholders reported similar

difficulties. However, more than half of the reports of difficulty came from interviewed stakeholders within the DHS program staff and the consultants.

The stakeholders mentioned their difficulties come as a result of obscure links and a lack of a clear path to the CDG on the DHS website, making it hard for stakeholders to locate information. One consultant said that he tried to search for the CDG on the DHS website using the provided search function, yet he still could not locate the guidelines. Some of the stakeholders expressing no difficulty mentioned that they keep the guidelines webpage bookmarked within their web browser, thus making for easy access after initially locating the CDG site.

4.3 Presentation of the Guidelines

As another objective we sought to determine how stakeholders currently feel about the presentation of the CDG. We attempted to determine what ways, if any, the CMB could modify the way the guidelines present information to better assist stakeholders in their roles. The following section presents the results of survey and interview questions pertaining to presentation and their analysis.

4.3.1 Low-cost Projects

The questionnaire contained two main sections on presentation. The first section asked the respondents whether they feel presenting the information from the CDG in a more compact, condensed way would better assist them in planning and delivering low-cost (A<\$10 million) projects. We also explored this topic further through the interviews.

4.3.1.1 Survey Results on Low-Cost Projects

We included four questions in our questionnaire pertaining to low-cost projects, two of which were open ended, and two questions pertaining to reference material. The first question aimed to gain an understanding of how well the CDG currently assists stakeholders in the planning and delivery of low cost projects. Figures 4.13a and 4.13b display the results of the first question.

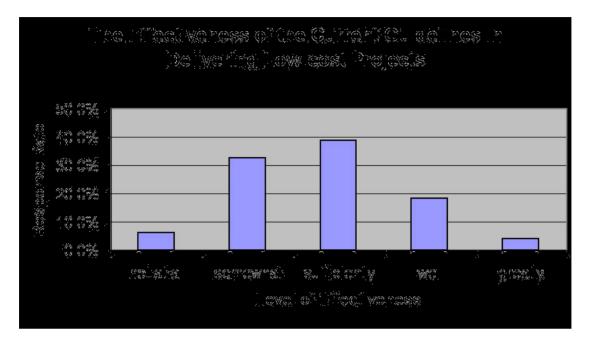


Figure 4.13a: The Effectiveness of the Current Guidelines in Delivering Low-cost Projects

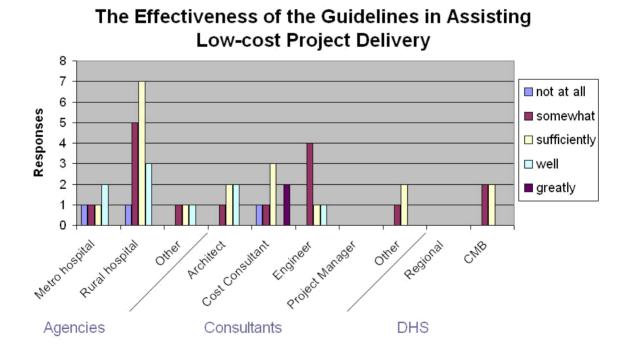


Figure 4.13b: The Effectiveness of the Guidelines in Assisting Low-cost Project Delivery

Figures 4.13a and 4.13b show that most of the responses (39%) on the effectiveness of assisting low cost project fell into to neutral category of "sufficiently." The same amount (39%) responded within the negative end of the scale, "somewhat" and "not at all." Only 22% of surveyed stakeholders responded within the positive end of the scale, "well" and "greatly." Looking at all responses, the overall effectiveness of the CDG with assisting low-cost projects lies within the negative end of the scale. The only responses within the positive end of the scale came from cost consultants, however the response from cost consultants overall remains neutral because of some cost consultants responding negatively.

The next question regarding low-cost projects asked an opened ended question prompting respondents for any difficulties that the any stakeholders may have encountered in the delivery of low-cost projects. Some of the remarks, directly taken from the responses, include:

- "Overwhelming size & amount of detail"
- "Cost constraints, which meant its was extremely difficult to meet mandated requirements"
- "The guideline is generic and does not address the intent for smaller projects."
- "Cumbersome to implement, and few if any on the team fully understand the requirements"
- "Not specific to low cost products, although it prompts and reminders which is handy"
- "Some requirements in schematic design and POE are suitable only for large projects, not small ones"

(Appendix G provides additional responses not listed above.) All participating stakeholders responded negatively to this section to no surprise, because the question asked for "any difficulties" that they have encountered. The responses to this section generally indicate that the planning and delivery process described within the CDG does not apply easily to low-cost projects. Those responding feel that the CDG does not accommodate low-cost projects well.

The third question relating to low-cost projects asked if a condensed summary of the guidelines would better assist stakeholders of low-cost projects. The respondents involved in low-cost projects provided an overwhelming response (74%) saying that a condensed summary of the CDG would better assist them low-cost project delivery. The response by stakeholder type had no particular trend, with a few "no" responses from each category (agency staff, consultant, DHS staff).

The final question pertaining to low-cost projects asked another open-ended question, prompting for any suggestions on improvements for how the CMB could improve the CDG to better assist low-cost projects delivery. Some of the responses, directly taken from survey data, included:

- "I feel that the some of the guidelines can be enhanced to refer to low cost projects specifically"
- "I think the guidelines should be the same for low-cost projects"
- "No do not believe that a \$7m project should be managed significantly differently than a \$ 67m project"
- "Perhaps a section could be added to specifically address low-cost projects"
- "Publish revisions & updates to consultants as when they occur"
- "The guidelines in the current form appear to address the requirements for all possible scenarios. A list that directs the user for requirements for low cost projects would assist the team greatly"
- "Links to examples would be helpful"

(Appendix G contains additional responses not listed above.) Of the twelve responses received on this question, three of the comments suggest that the guidelines already cover all the material necessary for low-cost projects. Some of the other comments suggest that possibly a separate guideline could better address the specifics required for low-cost projects. One of the other responses suggests that links to examples may make

it easier to understand what each guidelines requires for documentation and help improve the overall delivery of a low-cost project. The third remark from the responses to this question pertains to updating the CDG. The CDG undergo changes when new processes, procedures, and government regulations come into play and the stakeholders need to be informed of these changes to smooth the delivery of all projects.

4.3.1.2 Interview Results on Low-Cost Projects

In our interviews, we also asked the stakeholders if the CMB should produce a condensed version of the guidelines for the low-cost projects (less than \$10million). Figure 4.14 shows the responses broken down by stakeholder type and combined responses:

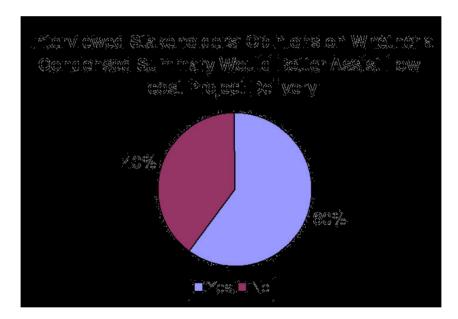


Figure 4.14: Interviewed Stakeholders' Opinions on Whether a Condensed Summary Would Better Assist Low-Cost Project Delivery

Figure 4.14 illustrates a slight preference for a condensed version of the CDG. Stakeholders in favour of a condensed version believe that some of the information in the CDG does not pertain to the low-cost projects. Moreover, low-cost projects have lower financial risks involved; thus, much of the risk assessment materials within the CDG do not apply. A majority of the DHS staff (DHS Program and CMB project managers) favours having a shorter version to the guidelines for small-scale projects.

On the other hand, stakeholders not in favour of a shorter version believe that having two versions of the guidelines could cause confusion among the users. They feel that the current guidelines work fine and have all the information necessary for completing low-cost projects. Also, the introduction of a condensed summary might cause confusion as stakeholders would have to distinguish which projects should follow which set of guidelines.

4.3.2 Reference Material

The other topic covered within the questionnaire and interviews related to presentation regards reference material. Currently the CDG does not contain any reference material. However, similar guidelines in other states (see section 2.3) contain a glossary as well as a list of acronyms. For this reason we sought feedback from the stakeholders on their opinions of these topics.

4.3.2.1 Survey Results on Reference Material

We include two questions in our questionnaire pertaining to reference material. These questions asked user if they think a glossary or list of acronyms would enhance the CDG.

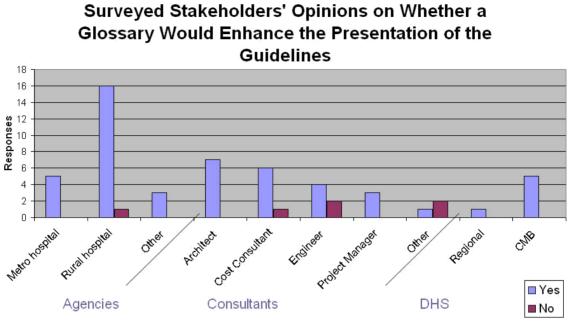


Figure 15a: Surveyed Stakeholders' Opinion on Whether a Glossary Would Enhance the Presentation of the Guidelines

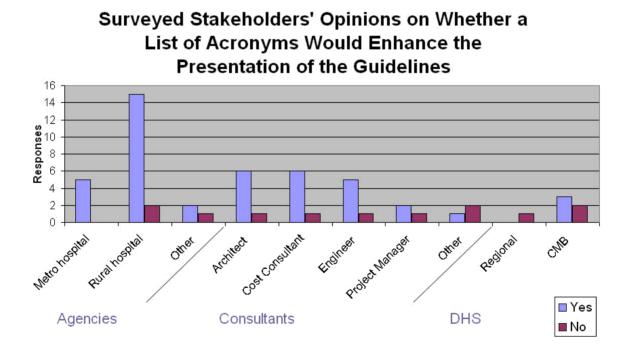


Figure 15b: Surveyed Stakeholders' Opinion on Whether a List of Acronyms Would Enhance the Presentation of the Guidelines

Figures 4.15a and 4.15b illustrate an overwhelming response that the CDG should contain both a glossary and a list of acronyms. All types of stakeholders feel that the

suggested reference materials would benefit the presentation of the information within the guidelines. With both construction and medical terms used throughout the guideline series, respondents feel a glossary would benefit those without a background in both the medical and construction fields. In fact, 89% of the population we surveyed felt that the use of a glossary would assist stakeholders in understanding the CDG. The majority of the engineers responded positively overall towards the use of a glossary, however onethird responded negatively. This may be due to the fact that the engineers are only concerned with their area of expertise and are familiar with all the terms required for their use of the guidelines.

The CDG include a large number of acronyms, which users may have a difficult time identifying if they are unfamiliar with the guidelines. The surveyed stakeholders apparently have had some difficulty in fully understanding the acronyms, with 79% of the responses in favour of including a list of acronyms as part of the CDG.

4.3.2.2 Interview Results on Reference Material

As in the survey questionnaire, we asked stakeholders questions pertaining to the inclusion of reference material within the guidelines to better make the guidelines more presentable for users. Figure 4.16 shows the responses of interviewees who chose to comment on reference material:

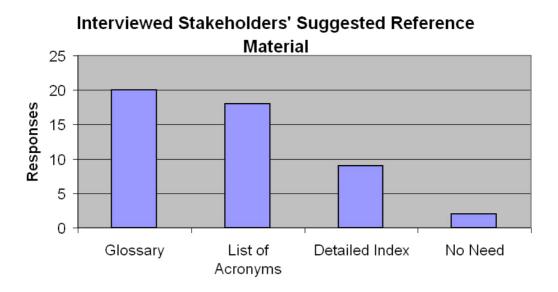


Figure 4.16: Interviewed Stakeholders' Suggested Reference Material

As illustrated in Figure 4.16, interviewed stakeholders expressed a high demand for a glossary and a list of acronyms. Some of the consultants want medical terms included in the glossary, while some of the agency staff want to see construction terms included in the glossary. Some of the stakeholders, who want a list of acronyms, said that they experienced difficulties in recognizing most of the acronyms when they were first introduced to the guidelines. The interviewed stakeholders mostly expressed the importance of having a list of acronyms within the CDG so that new stakeholders introduced to the guidelines do not feel confused. Also, some stakeholders expressed trouble locating specific information within the CDG and suggested that having a detailed index could remedy the problem.

Overall, the general consensus from interviewed stakeholders calls for reference material be added to the CDG. In addition, one of the CMB project managers stressed that any reference material included in the CDG must remain accurate through frequent updates to keep pace with new terms introduced into the system, which may spawn confusion. One of the stakeholders suggested that a glossary and list of acronyms both be added as a standalone document, thus, making it easier to update.

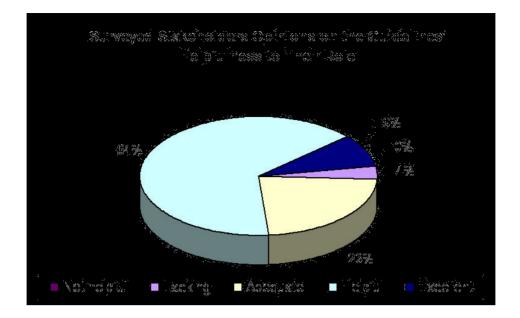
4.4 Content within the Guidelines

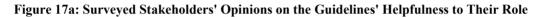
Through using both the survey and interviews, we sought to achieve another of our four key objectives. We wanted to determine if the CDG contained all the material necessary to assisting project planning and delivery. In both our surveys and interviews, we focused on asking stakeholders how the CMB should incorporate new Department of Treasury and Finance procedures into the guideline series.

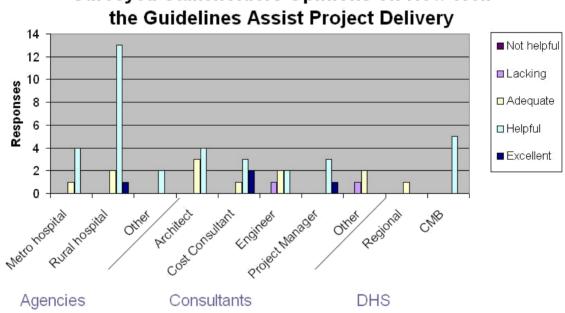
4.4.1. Effectiveness of the Guidelines

Using the survey, we wanted to assess how stakeholders thought about the effectiveness of the Capital Development Guidelines as a tool for assisting their project planning and delivery. In order to do so, we incorporated questions into the survey questionnaire. This section presents and discusses the outcomes of these questions.

Figures 4.17a and 4.17b display the results of the question: "Overall, how helpful were the guidelines to your role in planning and/or delivering DHS capital projects?"







Surveyed Stakeholders Opinions on How Well

Figure 17.b: Surveyed Stakeholders Opinions on How Well the Guidelines Assist Project Delivery

The results show that the majority (73%) of stakeholders surveyed found the guidelines "helpful" or "excellent," with most of the remaining respondents finding them "adequate." Only a few a few (4%) testified that the guidelines provide less than adequate assistance. Only some of the consultants in the "engineer" and "other" categories responded with an answer of "lacking."

The most plausible explanation for these results comes from the differences in the stakeholders' roles. CMB engages engineers to perform a limited role, that of designing the engineering systems of the projects. Engineers typically do not concern themselves with the project development process outside this role, and as such, the most useful guidelines to them contain design requirements, which exist in documents outside of the Capital Development Guidelines. Thus, the Capital Development Guidelines do not assist engineers as much as they assist the agencies, which play a role throughout the entire planning process. The architects, while technical consultants like the engineers, perform managerial roles for smaller projects unlike the engineers. The same explanation holds when comparing architects (managerial role) to cost consultants (technical role). Project Managers, by nature, take part in much of the planning and therefore need to know a great deal about the process spelled out within the Capital Development Guidelines. These presumptions fit with the fact, established in the Background chapter, that the CMB wrote the Capital Development Guidelines not for detailed technical design guidance, but process guidance for those without capital project experience, primarily agencies.

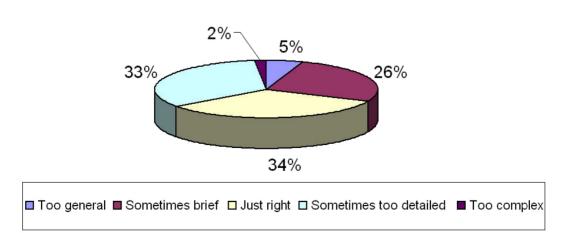
Overall, it appears that the Capital Development Guidelines play a helpful role in the process for stakeholders across the board. However, room for improvement remains based upon the number of "adequate" responses. Seeing that the Capital Development Guidelines try to assist a wide variety of stakeholders with different backgrounds and education, the room for improvement in their current presentation may prove quite small.

4.4.2 Level of Detail

Having the right level of detail within a guideline section can directly affect a stakeholder's ability to digest the information. Since the guidelines exist for both agency stakeholders with medical backgrounds and consultant firms with technical backgrounds, the right balance of detail plays an important role. Too much technical detail can confuse the agencies, while too little can hinder the consultants. In both our survey and interviews, we asked questions related to the detail within the guidelines.

4.4.2.1 Survey Results on the Level of Detail

Figures 4.18a and 4.18b display the results from the question asking stakeholders how they feel about the level of details within the guidelines. This question intended to measure whether or not the stakeholders thought the CMB wrote the guidelines in a too complex manner or in an overly simplistic manner for the stakeholders. Respondents chose from the following responses: too general, sometimes brief, just right, sometimes too detailed, and too complex.



Surveyed Stakeholders' Opinions on the Level of Detail within the Guidelines

Figure 18a: Surveyed Stakeholders' Opinion on the Level of Detail within the Guidelines

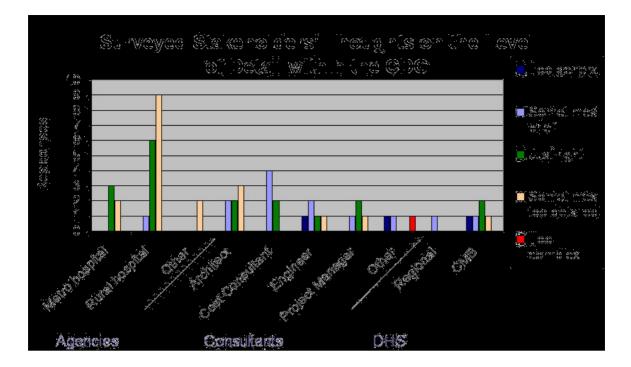


Figure 18b: Surveyed Stakeholders' Thoughts on the Level of Detail within the CDG

Looking to Figure 18b, the rural hospital population responded a great deal more with the "sometimes too detailed" response than the other stakeholders. Looking at the agencies as a whole, the agencies answered more often with "sometimes too detailed" than "just right" and only one agency stakeholder responded with "sometimes brief." As for the consultant population, "sometimes brief" appeared more often as a response compared to the agency population. Specifically, engineer consultants and those consultants in the other category leaned heavily to the too brief side responding with the "too general" option, of which none of the agency stakeholders selected. As for the DHS population, it leans towards the brief side, however only slightly. Overall, no single response type took the majority, warranting some examination.

The results to the question make sense when examining what the different stakeholders expect from the content of the Capital Development Guidelines. Agency stakeholders typically have an educational background involved with the health professions, not architecture and engineering. To the agencies, when the guidelines delve too deeply into the design aspects, the terminology and process most likely will appear foreign and complex. As for the consultant stakeholders, educated typically as architects and engineers, they possess a more advanced technical knowledge and easily digest the detail-laden design portion of the guideline series. The agencies approach the guidelines expecting something written at their level and easy to comprehend, while the consultants expect the guidelines to contain enough detail to match their knowledge.

Aiming for the middle road between these two expectations, the CMB has tried to write the guidelines for both populations. The fact that the "just right" response does not comprise the majority stands as a symptom of a potential dilemma. If the CMB effectively walked the middle path between writing for non-technical agency stakeholders and technical consultant stakeholders, the "just right" response should make up the majority. However, if the CMB needs to improve the guidelines, does a middle path between agency and consultant knowledge and expectation exist?

4.4.2.2 Interview Results on the Level of Detail

Another question we asked the stakeholders was about their feelings towards the level of detail within the guidelines. Figure 19 shows the responses broken down by stakeholder type:

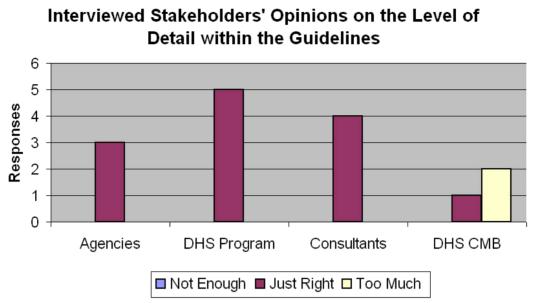


Figure 19: Interviewed Stakeholders' Opinions on the Level of Detail within the Guidelines

An overwhelming number (87%) of stakeholders describe the level of detail as "just right." Most of the stakeholders feel that the guidelines are clear and concise. Also, the guidelines serve their purpose well for capital project delivery by describing the whole process well and assist getting the job done properly.

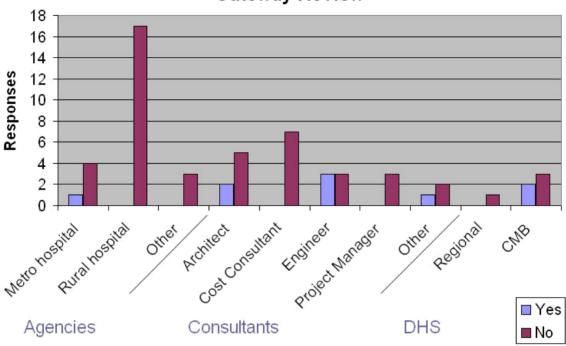
However, some stakeholders feel that guidelines suffer from some repetition and they also assume that the user has experience in capital project delivery. Major criticism of the guidelines came from CMB project mangers. One of the CMB project managers believes that the guidelines favour large projects (\$20-50million) and the other said that the CDG contain too much information. The last CMB project manager elaborated on "too much information" by saying that, although some old sections of the CMB has updated or replaced by new sections of the CDG, the old sections still remain as part of the guidelines.

4.4.3 The Gateway Review Process

A little over a year ago, the Victorian Department of Treasury and Finance (DTF) introduced a program called the Gateway Review. The Gateway Review process intends to monitor the spending of state funds on projects with a financial risk involved. Since the capital projects that the DHS plans and delivers involve rather high financial risks, the Gateway Review process applies to most DHS capital projects. In the coming years, more and more stakeholders may take part in a project undergoing a Gateway Review and may even take part in the review process themselves. In order to ascertain stakeholders' need for information on the Gateway Review, we asked questions pertaining to the topic within the web survey and the interviews. This section presents the resultant data and the analysis.

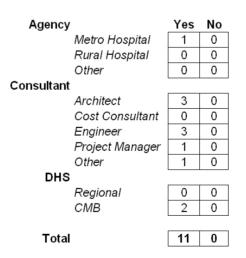
4.4.3.1 Survey Results on the Gateway Review Process

A series of questions attempted to gather responses to determine how or whether to incorporate any information on the Department of Treasury and Finance's (DTF) new process for reviewing government-sponsored projects. The initial question asked if the respondent had experience with a project that had undergone a Gateway Review. Next, the questionnaire used three yes/no questions asking whether the guidelines should reference the Gateway Review material on the DTF website, summarize the process within the guidelines, or be included in detail. Figure 4.20 and Tables 4.3a, 4.3b, and 4.3c show the results from the questions.



Surveyed Stakeholders that Have Experienced a Gateway Review

Figure 4.20: Surveyed Stakeholders that Have Experienced a Gateway Review



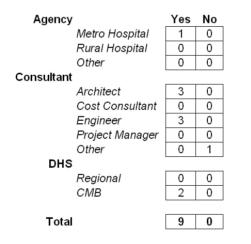
Surveyed Stakeholders' Thoughts on Referencing the Gateway Review

 Table 4.3a: Surveyed Stakeholders' Thoughts on Referencing the Gateway Review

Surveyed	Stakeholders'	Thoughts on
Summa	rising the Gate	way Review

Agency		Yes	No		
	Metro Hospital	1	0		
	Rural Hospital	0	0		
	Other	0	0		
Consultant					
	Architect	3	0		
	Cost Consultant	0	0		
	Engineer	3	0		
	Project Manager	1	0		
	Other	1	0		
DHS					
	Regional	0	0		
	CMB	2	0		
Total		11	0		

Table 4.3b: Surveyed Stakeholders' Thoughts on Summarising the Gateway Review



Surveyed Stakeholders' Thoughts on Providing Full Detail on the Gateway Review

Table 4.3c: Surveyed Stakeholders' Thoughts on Providing Full Detail on the Gateway Review

Figures 4.3a, 4.3b, and 4.3c page show the experience of the respondent population with the Gateway Reviews. As the data show, only seven respondents say they have experience with a project that has gone through a gateway review. However, more than seven respondents completed the optional questions concerning the incorporation of the gateway review information. This could show that stakeholders possess enough knowledge of the existence of the Gateway Review process that they feel they can comment on its inclusion or they possibly drew conclusions blindly not based on actual knowledge of the process. Of the three questions concerning the incorporation, all stakeholders responding said yes except for one saying not to include detailed information on the Gateway Review process.

The reasoning behind the overwhelmingly positive response remains unknown. Respondents did not make any comments in the free response area of this section of the questionnaire to help explain their responses. However, if the majority of the entire stakeholder population feel the same way, then it would appear that the CMB should incorporate the gateway review process in detail, possibly as a stand-alone guideline chapter.

4.4.3.2 Interview Results on the Gateway Review Process

As part of our interviews, we asked the stakeholders whether or not the Gateway Review should be incorporated into the guidelines and if so, how it should be done. Figures 4.21a and 4.21b show the responses broken down by stakeholder type and all the responses combined:

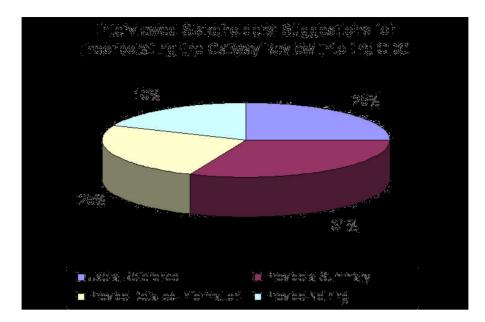


Figure 4.21a: Interviewed Stakeholders' Suggestions for Incorporating the Gateway Review in the CDG

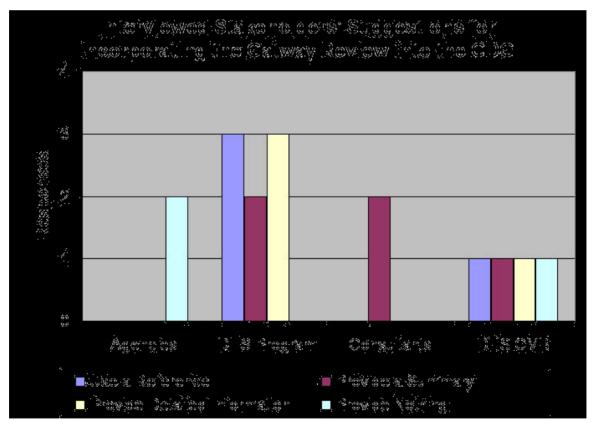


Figure 4.21b: Interviewed Stakeholders' Suggestions for Incorporating the Gateway Review in the CDG

The Agency stakeholders feel that the Gateway Review does not directly involve themselves so they feel little concerned. DHS Program staff and most of CMB project managers we interviewed want the Gateway Review included in the guidelines in some manner and the Consultants just want a summary for their reference. Since the Department of Treasury and Finance introduced the Gateway Review a year ago, one of the CMB project managers does not think that it should be added to the guidelines. Overall, the majority (81%) of the respondents want the Gateway Review to be included into the guidelines but we there are mixed results on how to include the Gateway Review into the CDG.

4.4.4 Partnerships Victoria

The Victorian Department of Treasury and Finance recently introduced a private financing strategy for hospitals entitled Partnerships Victoria. Under the Partnerships Victoria (PV) procurement strategy, the private organisations provide funding for the resultant facilities and administer them after commissioning. In order to determine whether stakeholders feel the guidelines should provide information on PV, we asked questions pertaining to the topic in both the web survey and the interviews.

4.4.4.1 Survey Results on Partnerships Victoria

Much like the questions concerning the Gateway Reviews, a very similar series of questions attempted to assess the feeling of stakeholders concerning the integration of information on the Partnerships Victoria into the guidelines. Using questions structured in the same manner, the first question asked whether the respondent has experience with a project as a part of the Partnerships Victoria procurement strategy. Next, the following three questions asked if the guidelines should reference, include a summary, and include full details of the Partnerships Victoria strategy. Figure 4.22 and Tables 4.4a, 4.4b, and 4.4c display the resultant responses.

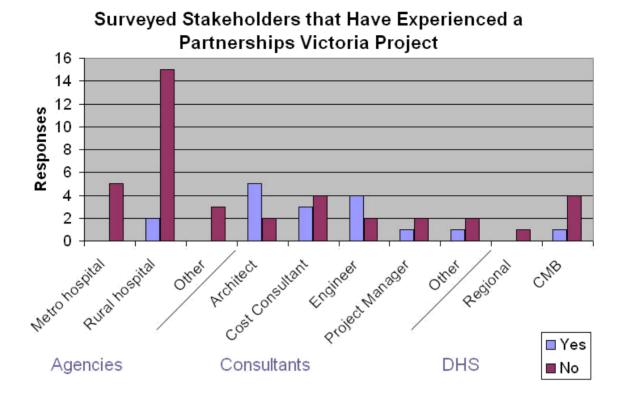
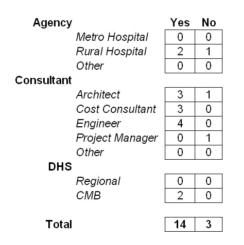
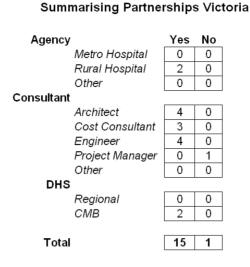


Figure 4.22: Surveyed Stakeholders that Have Experienced a Partnerships Victoria Project



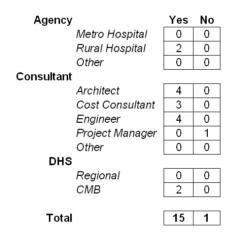
Surveyed Stakeholders' Thoughts on Referencing Partnerships Victoria

Table 4.4a: Surveyed Stakeholders' Thoughts on Referencing Partnerships Victoria



Surveyed Stakeholders' Thoughts on

Table 4.4b: Surveyed Stakeholders' Thoughts on Summarising Partnerships Victoria



Surveyed Stakeholders' Thoughts on Providing Full Detail on Partnerships Victoria

Table 4.4c: Surveyed Stakeholders' Thoughts on Providing Full Detail on Partnerships Victoria

Compared to the Gateway Review, more stakeholders have had experience with Partnerships Victoria. Of those responding, the architect and engineer consultants responded more affirmatively than negatively. As for the agency stakeholders as a whole, only two responded affirmatively. Overall, 70% of those responding have not been involved with a Partnerships Victoria project. Like the Gateway review, the majority of respondents said that all three forms of incorporation should take place. However, the incorporation through a summary netted a hire ratio of positive to negative responses compared to the methods of reference and full detailed information.

The data do not shed light on why engineers and architects have more Partnership Victoria experience than others. Engineers and architects have similarities in the fact that they both contribute heavily to the design of facilities and may not be too involved with the early planning stage of projects. As a result, a possibility exists for them to become involved with more projects than agency stakeholders and other consultants in the same timeframe. This would allow for the possibility of them becoming involved with a Partnerships Victoria project.

As with the Gateway Review questions, the survey does not capture the cause behind the results. Unlike the Gateway Review, the number of respondents to the questions about incorporation did not outnumber those responding affirmatively to the question on experience. This could mean that the responses concerning incorporation may possess more validity for the Partnerships Victoria section because those responding most likely had actual firsthand experience.

4.4.4.2 Interview Results on Partnerships Victoria

Also as part of our interviews, we asked the stakeholders whether the CMB should incorporate the Partnerships Victoria procurement strategy into the guidelines and, if so, in what manner. The following graphs show the responses broken down by stakeholder type and all responses combined:

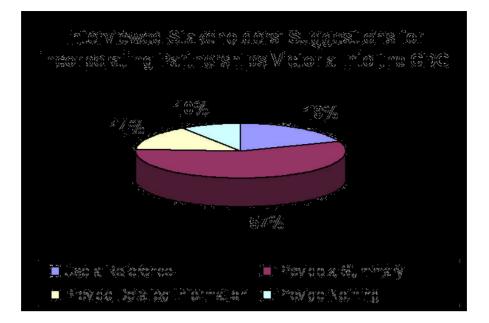


Figure 23a: Interviewed Stakeholders' Suggestions for Incorporating Partnerships Victoria into the CDG

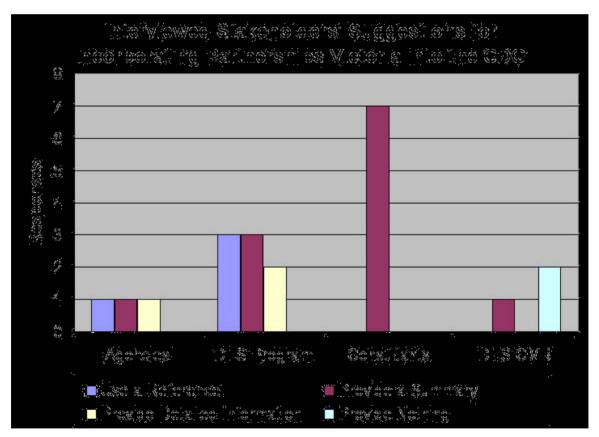


Figure 23b: Interviewed Stakeholders' Suggestions for Incorporating Partnerships Victoria into the CDG

The majority (90%) of stakeholders want the CMB to include PV in the guideline series with only two CMB project managers saying that it CMB should not include it. The two project managers explained their opinions, stating that because of PV's youth and the chance that DTF could discontinue the program, CMB should not include PV within the guidelines.

Only the stakeholders from DHS Program and agency staff supported the idea of providing detailed information on PV along with references to DTF documents. The consultants unanimously support including just a summary of PV within the guidelines. Overall, a significant percentage (57%) of the stakeholders expressed support for CMB's including a summary.

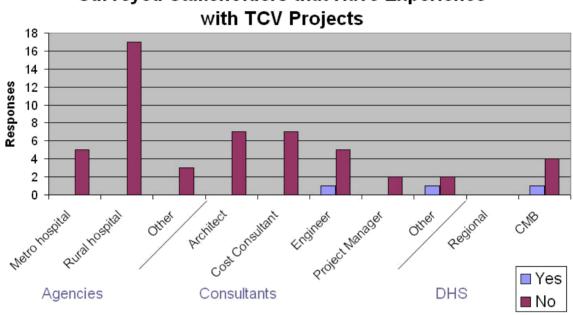
4.4.5 Treasury Corporation Victoria

Much like Partnerships Victoria, Treasury Corporation Victoria (TCV) introduces another funding strategy for stakeholders to employ. Even when the DHS capital projects require large-scale parking arrangements, such as a car park, money allocated for the capital development cannot be spent on the parking facilities. The DTF created the TCV program to provide funding to assist agencies in constructing parking solutions using specially allocated state money not coming out of the capital expense pool. We sought to determine through our web survey and interviews whether stakeholders feel the need to include information on TCV and to what degree. The following section presents and analysis this data.

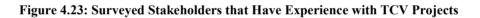
4.4.5.1 Survey Results on Treasury Corporation Victoria

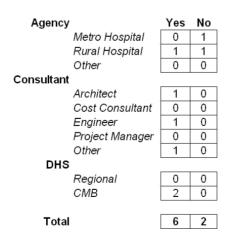
Like the Partnerships Victoria program, Treasury Corporation Victoria (TCV) allows for an alternative procurement strategy for projects, although TCV primarily

funds car parks. In a similar fashion to the gateway review and Partnerships Victoria sections, our questionnaire first established experience with TCV projects and then assessed the respondents' feelings towards the three incorporation methods. The following graph and tables contain the results of the series of questions.



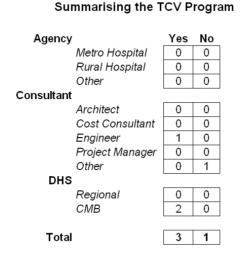
Surveyed Stakeholders that Have Experience





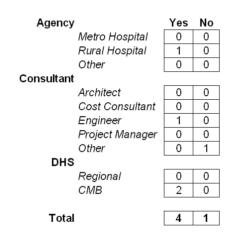
Surveyed Stakeholders' Thoughts on Referencing the TCV Program

Table 4.5a: Surveyed Stakeholders' Thoughts on Referencing the TCV Program



Surveyed Stakeholders' Thoughts on

Table 4.5b: Surveyed Stakeholders' Thoughts on Summarising the TCV Program



Surveyed Stakeholders' Thoughts on Providing Full Detail on the TCV Program

Table 4.5c: Surveyed Stakeholders' Thoughts on Providing Full Detail on the TCV Program

Only three stakeholders responded saying that they have experience with a project funded through TCV. As in the case of the Gateway Review section, more than three respondents completed the following three questions on incorporating TCV into the guideline series. However, the responses for the three incorporation methods did not take on the overly affirmative response that the Gateway Review and Partnerships Victoria sections did.

The totals for the questions on incorporation demonstrate inconsistencies within the results. Some respondents completed only a portion of the three questions, may have chose not to voice their opinion on the remaining questions. This again raises the question of whether or not the stakeholders based their responses on experience or none at all.

4.4.5.2 Treasury Corporation Victoria

For Treasury Corporation Victoria (TCV), we asked the same questions as with the previous two topics, Gateway Review and Partnerships Victoria. Figures 4.24a and 4.24b show the responses broken down by stakeholder type:

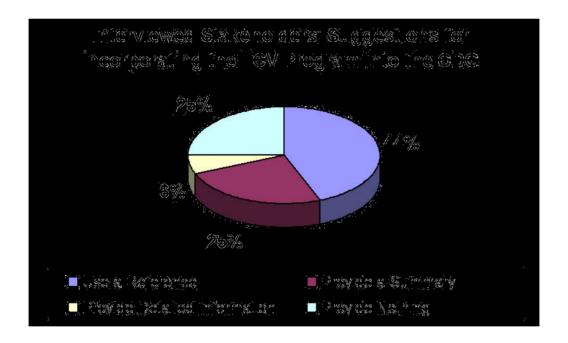


Figure 4.24a: Interviewed Stakeholders' Suggestions for Incorporating the TCV Program into the CDG

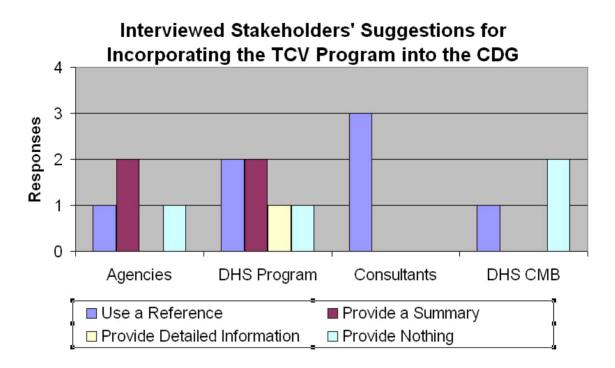


Figure 4.24b: Interviewed Stakeholders' Suggestions for Incorporating the TCV Program into the CDG

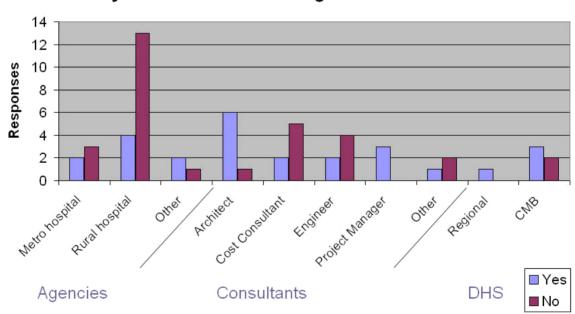
The majority (75%) of responses indicate that stakeholders want the CMB to include TCV within the guidelines. Only one interviewed stakeholder from the DHS Program wants the guidelines to include detailed information on TCV. Like the Gateway Review and Partnerships Victoria questions, the consultants all gave the same response. In this case, the consultants just want a reference to TCV in the guidelines. Only two interviewed stakeholders from the agencies and DHS Program area want the CMB to include a summary of TCV within the guidelines. In addition, one of the two CMB project managers favours not including TCV in any form, believing that TCV, dealing with funding and not project development, has no relevance to the guidelines. The other CMB project manager not supporting CMB including TCV believes that TCV has not matured enough since the Department of Treasury and Finance introduced it only recently.

4.4.6 The Checklists

The CMB designed the checklists in the back of some of the guideline chapters to assist stakeholders in making sure everyone involved meets requirements for phases of planning and delivery. The CMB wanted to know whether the stakeholders actual used the checklists and, if so, their usefulness. In both the interviews and the survey, we asked stakeholders about their usage of the checklists.

4.4.6.1 Survey Results on the Checklists

The survey questionnaire first contained a yes/no question asking the respondent if he or she uses the checklists. Then, an open response question allowed the respondent to elaborate on how they feel CMB can improve them. Figure 25 shows the results of the first question.



Surveyed Stakeholders' Usage of the Checklists

Figure 25: Surveyed Stakeholders' Usage of the Checklists

From first glance at Figure 25, the responses look evenly dispersed. Closer inspection reveals that 54% responded saying that they do not use the checklists.

However, two features stand above the rest within the figure: the rural hospital response and the architect/project manager response.

Unlike some of the metro hospitals, the rural hospitals tend to lack a dedicated capital works staff specifically dealing with capital development and the use of the CMB guidelines. It would make sense that the rural hospital agencies would use the checklists more than the metro hospitals, but the data demonstrates that this does not occur. For some reason, those who would most likely benefit from their use might not actually use the checklists.

As for the architects and project managers, they showed a much stronger use of the checklists than any other stakeholder type. Only a single architect out of all responding architects and project managers responded saying he or she did not use the checklists. On smaller scale projects, architects typically take on a managerial role within the project. Project managers, by nature, act in a similar role. These facts combined with the resultant data suggest that those in managerial roles may find the checklists more useful. The data for the DHS stakeholders supports this idea, with the Program and CMB stakeholders saying they use the checklists more than not. This may mean the CMB needs to target a specific population with the checklists or make them more general for use by everyone.

4.4.6.2 Interview Results on the Checklists

We also asked our interviewees whether or not they use the checklists provided within the CDG. The following figures show the response by stakeholder type and all responses combined:

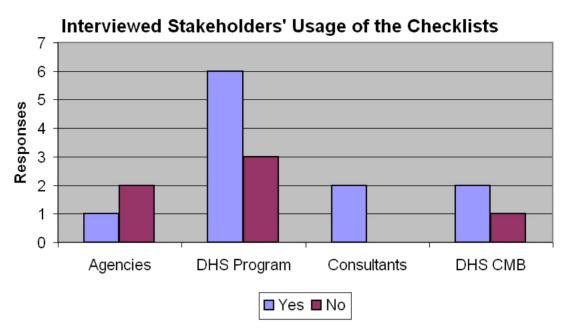
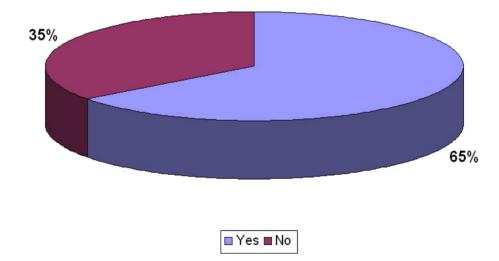


Figure 26a: Interviewed Stakeholders' Usage of the Checklists



Interviewed Stakeholders' Usage of the Checkslists

Figure 26b: Interviewed Stakeholders' Usage of the Checklists

The majority (65%) of the stakeholders said that they use the checklists. The figure shows only the agencies responded primarily negatively, possibly be because the agencies do not take responsibility for ensuring the completion of all objectives before advancing the project to the next phase. In addition, two of the DHS Program staff and one CMB

project manager, said that they have the process memorized and as a result do not use the checklists.

Most stakeholders said that the checklists serve as a useful reminder, which helps them make sure they complete everything on time. However, some stakeholders feel that the CMB needs to simplify the checklists more by including step-by-step directions of tasks stakeholders need to accomplish. One of the consultants believes that some marginal improvements would make the checklist much more effective. Some stakeholders also stressed that the checklists should include everything they need to complete.

4.4.7 Specific Guideline Usage

In order to understand which sections of the guidelines different stakeholders use, which sections they view as important, and how they feel about the ease of use of the sections, we included a table of questions within the questionnaire. The table had three questions for every guideline section from 1.1 to 5.5. The first questions asked whether the respondent had used that particular section in the past. The next question asked whether their job required using that particular section. The last question prompted the respondent to rate the section on ease of use using the terms easy, fair, or hard.

4.4.7.1 How Stakeholders Use the Guidelines

Out of all the respondents, the DHS staff answered, on average, that they use almost every section. Behind the DHS, the consultants responded affirmatively more so than the agencies did. The following figure shows the percent responding affirmatively for the DHS, consultant, and agency groups as a whole.

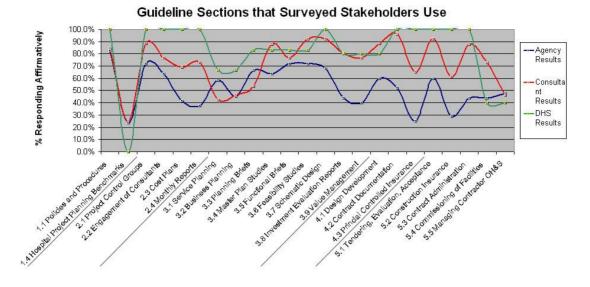


Figure 4.27: Guideline Sections that Surveyed Stakeholders Use

The way the agency and consultant curves mimic one another for the majority of Figure 4.27 poses some interesting ideas. The guideline sections that tangle the two lines appear to be the *3.1 Service Planning*, the *3.2 Business Planning*, and the *3.3 Planning Brief* section. More agencies responded saying they use these sections than consultants. Possible reasons come from the fact that these three sections all deal with some of the initial planning of projects. Agencies and the CMB develop the Service Plan and Business Plan typically before the CMB or agencies even engage consultants (see Appendix F). This could help account for why less than 60% of surveyed consultants responded saying they have used these three sections.

Figure 4.27 also displays another interesting feature concerning agencies. For eleven different sections, surveyed agencies responded positively less than 50% of the time. These sections include: 1.4 Hospital Project Planning Benchmarks, 2.3 Cost Plans, 2.4 Monthly Reports, 3.2 Business Planning, 3.8 Investment Evaluation Reports, 3.9 Value Management, 4.3 Principal Controlled Insurance, 5.2 Construction Insurance, 5.3 Contract Administration, 5.4 Commissioning of Facilities, 5.5 Managing Contractor OH&S. We cannot definitely determine the reasoning behind these results; however, they do lead to a few possible explanations. If a stakeholder does not use a guideline section, a few possible reasons may account for the stakeholder's actions, or lack thereof. Possibly, the stakeholder does not need to use the guideline section to perform his or her duty as a stakeholder because his or her role makes the content of the guideline section irrelevant. Another reason could be that the stakeholder receives the information within the guideline section from another source, quite possibly a DHS Program or CMB staff member.

4.4.7.2 How the Guidelines Apply to Stakeholders' Roles

After responding as to whether or not they have used a section, the stakeholders were asked whether they felt the section has relevance to their role in project planning and delivery. The question attempted to provide information on which sections stakeholders thought of as important. Figure 4.29 displays the results from the question.

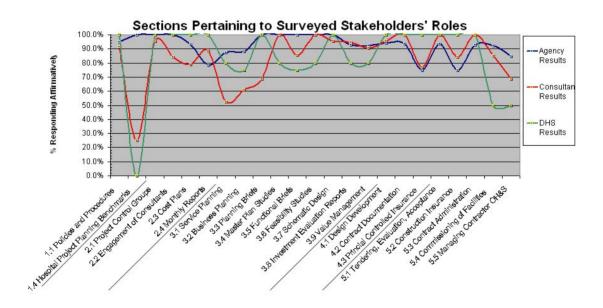


Figure 4.28: Sections Pertaining to Surveyed Stakeholders' Roles

Many of the stakeholders responded affirmatively at least 80% of the time. The immediate reasoning behind this comes from the fact that the questionnaire allowed for respondents to skip this question if they said they have not used the section in question.

However, that fact aside, the consultant responses dipped well below the 80% mark for four different guideline sections.

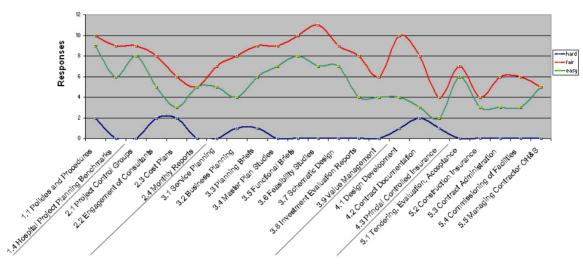
Common to both the consultant and DHS stakeholders surveyed, section 1.4 Hospital Project Planning Benchmarks appears very much not related to their jobs. The consultants had a positive response rate of 25%, while the DHS staff had a baseline zero positive response rate. The fact that that particular section exists in draft form provides the most plausible explanation, as only those testing the draft would have had exposure to it.

Another interesting feature of the results looks very similar to that in the previous figure. For the *3.1 Service Planning, 3.2 Business Planning*, and *3.3 Planning Brief* sections, the consultants responded positively with rates of 52.6%, 61.1%, and 68.4% respectively. These results reinforce the findings in the last section, with the consultants responding affirmatively roughly half the time to the question of whether they use those three sections. The same reasoning from before holds; the CMB and agencies typically do not engage consultants until after they complete Service Plan and Business Plan.

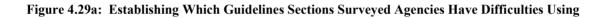
Another interesting finding amongst the data exists for the sections 4.3 Principal Controlled Insurance and 5.2 Construction Insurance. At both points within the figure, the positive response rates for both consultants and agencies dip roughly to the 80th percentile mark. In the previous figure, a similar dip occurs. If the sections in question contain out of date information or other sections have superseded them, it could explain the dips.

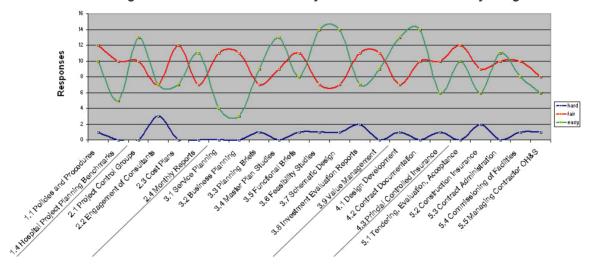
4.4.7.3 Usability of the Guideline Sections

The last question for each section prompted the respondent to rate the usability of that particular section on a three-point scale: easy, fair, and hard. The question attempted to find any sections stakeholders have a difficult time to using. Figure 4.29a, 4.29b, and 4.29c following figures visually displays the responses received.



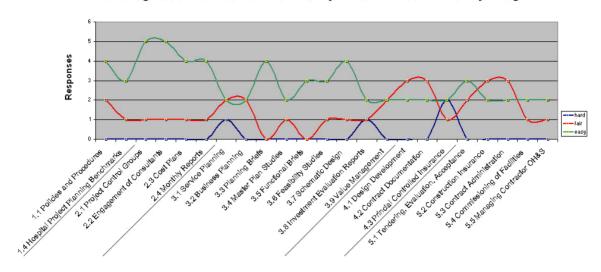
Establishing Which Guideline Sections Surveyed Agencies Have Difficulty Using





Establishing Which Guideline Sections Surveyed Consultants Have Difficulty Using

Figure 4.29b: Establishing Which Guidelines Sections Surveyed Consultants Have Difficulties Using



Establishing Which Guideline Sections Surveyed DHS Staff Have Difficulty Using

Figure 29c: Establishing Which Guidelines Sections Surveyed DHS Staff Have Difficulties Using

The most interesting findings exist in a comparison between the figures representing the agencies' responses with that of the figure showing the consultants' responses. On first glance, the most glaring difference occurs between the lines representing the fair and easy responses. In Figure 4.29a, for the agencies' responses, the two lines touch at one point, but otherwise seem to move almost in harmony. On the contrary, within the figure for the consultants' responses, the two lines intertwine like a strand of DNA and cross paths at a dozen different points. Visually, there exists a definite difference of opinions between agencies and consultants, and there must exist some sort of meaning behind it all.

In general, Figure 4.29b shows that consultants typically have an easier time using the guideline series as a whole as Figure 4.29a, for the agencies, never shows the easy line surpassing the fair line. However, a few sections appear to pose difficulty for some consultants. Just as in the last two sections, *3.1 Service Planning* and *3.2 Business Planning* both appear to provide some difficulties for consultants, with the fair response towering over the easy responses, although no responses of hard. Again, the *4.3 Principal Controlled*

Insurance and 5.2 Construction Insurance sections provide interesting results, with consultants have more fair than easy responses and even one or two hard responses. As for the 1.4 Hospital Project Planning Benchmarks and 2.3 Cost Plans sections, similar patterns exist.

Within the agencies' responses, similar trends occur. Much like in the previous two sections and with the current consultant usability data, problems appear to exist with the 4.3 Principal Controlled Insurance and 5.2 Construction Insurance sections. Prominent dips occur in Figure 4.29a for the agency data at these locations. This theme has occured across the last few figures.

4.4.8 Post Occupancy Evaluations

When we began our interviews, we did not ask our interviewees anything about Post-Occupancy Evaluation (POE). However, when we gave them the opportunity to express their feelings on any topics we did not cover in the interview, most of the interviewees talked about POE. After looking at this trend, we added POE to our list of interview topics.

All of the interviewees, who commented on POE, strongly believe that POE's need to take place. In general, they all mentioned that POE's provide an opportunity to learn from both the positive and the negative aspects of a project that everyone can apply or avoid in future projects. POE's can also act as a self-assessment tool for all stakeholders involved with a project. However, most of the stakeholders stressed a need for a system where all the stakeholders involved in a project can easily share project data (e.g. project reports) in order for any POE method to succeed.

The majority of stakeholders also feel that a third party stakeholder should perform the POE's. However, some stakeholders believe that allocating funding would prove the most difficult step in establishing a POE program as performing a POE on almost every capital project would come at a high cost. One of our interviewees, Cassie Izzard, provided us with a report on what she feels a POE program should include. Appendix I contains her report verbatim.

4.4.9 Generic Briefs

Another topic arose from our interviews that we did not originally include within the interview protocol. Many interviewed stakeholders brought up the topic of Generic Briefs, facility design guidelines primarily produced by the DHS Program areas. After adding Generic Briefs to the interview protocol, we asked our interviewees whether the CMB should reference the Generic Briefs within the guidelines. All interviewees familiar with the Generic Briefs stressed that the CDG should definitely reference the Generic Briefs because of their helpfulness in providing design assistance. Some consultants mentioned off topic that the stakeholders need to view the generic briefs as flexible guidelines and not rigid rules, allowing for design changes to better suit the particular project in question.

Most interviewed stakeholders expressed difficulties accessing the Generic Briefs through the web. Primarily, the Generic Briefs reside upon DHS Program area websites, however, in the past, the CMB provided links to the Generic Briefs from the same site hosting the CDG documentation. Currently, the links do not function and consultants find it hard to navigate through the DHS website to find the Generic Briefs. Interviewees generally suggested that the CMB should once again include the Generic Briefs on the same webpage as the CDG for easier access. In addition, two of the consultants we interviewed had specific comments on the Generic Briefs:

- Should include briefs for dental facilities
- Should incorporate university integration (teaching facilities) with hospital design
- Not detailed enough for radiology

- Need to include the Environmentally Sustainable Design Guidelines
- Residential Aged Care Generic Brief created without user input
- Make sure people have the latest version of the documents

4.4.9 Updates

We also asked our interviewees about their feelings on the currency of information the guidelines. All four types of stakeholders agreed unanimously that the CMB needs to update the CDG. Most stakeholders agreed that the CMB should have a better method for to updating the CDG and letting the users know about the changes. One stakeholder suggested that the CMB could use emails to inform stakeholders about any updates or changes. The stakeholders from the CMB and agencies suggested that the CMB should formally review and update the CDG at least every five years.

4.4.10 Specific Comments on CDG

In general, stakeholders think of the CDG as very useful documents in capital project delivery. However, all the stakeholders believe that the guidelines need improvement. Several of the stakeholders stressed that the CDG need to clarify which parts of the guidelines they should consider mandatory and which sections allow for flexibility. We also received comments on specific sections of the guidelines listed below according to the stakeholder type.

Agencies Staff:

- o 3.2 Business Plan is redundant
- 3.3 Planning Brief is useful
- 5.5 Managing Contractor OH&S needs clarity and improvement

Consultants:

- 1.4 Benchmarking Guidelines need to explain how the benchmarks were set
- 0 5.1 Tendering, Evaluation, Acceptance needs more development
- Planning and Documentation phases need more detail

CMB Project Mangers:

- 1.3 Asset Assessment should be performed
- 2.3 Cost Planning is terrible
- o 3.2 Business Planning not done
- 0 5.4 Commissioning of Facilities needs more development
- 5.5 Managing Contractor Occupational Health and Safety (OH&S) needs more development

DHS Program Staff:

- 0 1.1 Policies and Procedures is helpful and serves as a timeline
- o 3.1 Service Planning needs more detail and needs to be updated
- 3.9 Value Management is not performed
- 0 3.8 Investment Evaluation is superseded by Gateway Review
- 4.1 Design Development should be approved by Program staff
- 5.4 Commissioning of Facilities needs work

4.5 User Education and Assistance

The final object of the project involved assessing stakeholders' thoughts on the use of education and training on the DHS capital planning and delivery process and CDG. We focused on how users currently receive assistance and how they prefer future assistance with the planning and delivery of capital projects. The following sections presents and analyses the results pertaining to education and assistance from both our interviews and the survey.

4.5.1 Survey Results

We included four questions regarding education and assistance within the questionnaire, including one open-ended question. The first question aimed to see from whom the stakeholders received assistance. The following figures display the results from the first question.

Where Surveyed Stakeholders Go for Assistance

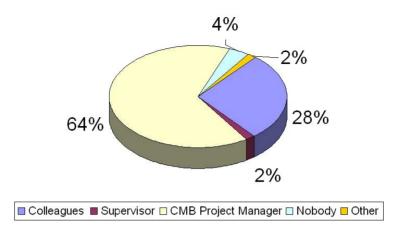
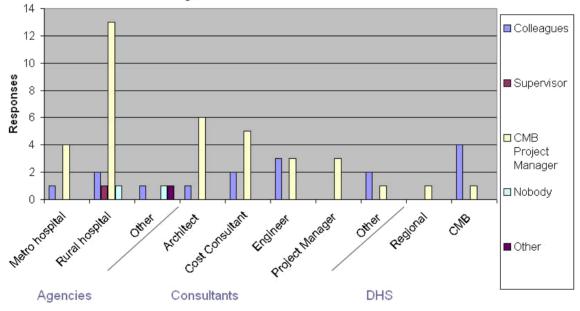


Figure 4.30a: Where Surveyed Stakeholders Go for Assistance



Where Surveyed Stakeholders Go for Assistance

Figure 4.30b: Where Surveyed Stakeholders Go for Assistance

The two previous figures show the results of the question, "If and when you don't understand something within the guidelines, whom do you typically seek assistance and clarification from?" The results show that a large majority of the respondents, 64%, said they seek assistance from the CMB project manager, and 28% of the responses seek assistance from their colleagues. Interestingly, 25% of all respondents choosing

"colleague" work as CMB project managers, whose colleagues work as CMB project managers as well.

The next question in the education and assistance section to the questionnaire asked, "What would be your preferred method for accessing the information you require to plan and deliver DHS projects?"

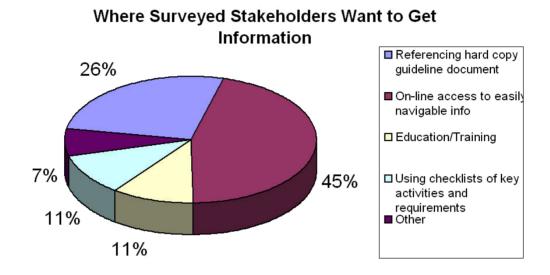
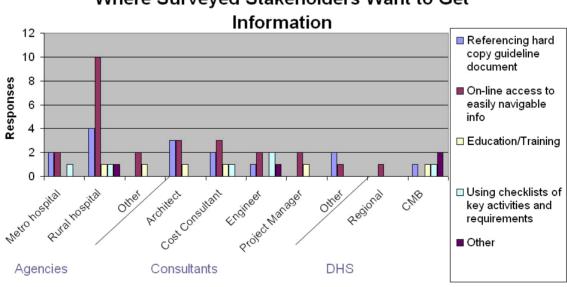


Figure 4.31a: Where Surveyed Stakeholders Want to Get Information



Where Surveyed Stakeholders Want to Get

Figure 4.31b: Where Surveyed Stakeholders Want to Get Information

From the previous figures, a large portion of the respondents, 45%, would prefer to access information needed for the delivery of DHS projects through the use of on-line access to easily navigable information. Also, many of the respondents (26%) would prefer referencing hard copies. The most significant difference comes from rural hospital respondents, 59% said they would prefer to access their information through on-line access to easily navigable information. Since the rural hospital agency responses make up a large amount of the respondent population, this affected the overall results. Ignoring rural hospital responses, referencing hard copies and on-line access remain the most preferred methods for accessing information, but on a more equal basis.

Although only 11% of respondents preferred training, the results of the third question on education and training show that those surveyed view training as more important as the previous question would suggest. Of the respondents, 72% responded to the optional question "If you prefer to receive education/training, how would you prefer to receive that education," although only intended for the 11% that responded saying they would prefer education/training. This leads us to believe that although respondents may not prefer education and training as a method to receive information required to deliver DHS projects, stakeholders view training as important.

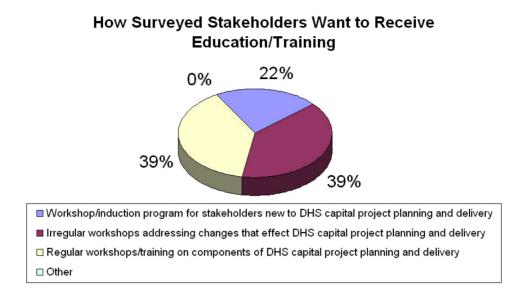
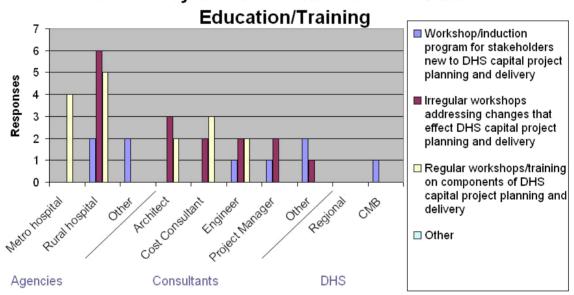


Figure 4.32a: How Surveyed Stakeholders Want to Receive Education/Training



How Surveyed Stakeholders Want to Receive

Figure 4.32b: How Surveyed Stakeholders Want to Receive Education/Training

The figures show that respondents attach equal importance to irregular workshops on changes to the CDG and regular workshops on components of DHS capital project planning and delivery. Also, 22% of respondents think the induction workshops for stakeholders new to DHS capital projects would benefit new stakeholders.

The final question of the section, "Please list any other comments or suggestions pertaining to receiving assistance or information on the DHS project planning and delivery process," further explored surveyed stakeholders' thoughts on education and assistance. The results of this section had a variety of responses. One respondent commented saying that for the dozens of projects he or she has worked on, he or she cannot recall the CMB project manager ever asking, during the first meeting for a project, whether all stakeholders had copies of the guidelines.. Two other respondents commented, "Project managers need to be trained to be trainees of CDG" and "The DHS could assign a dedicated person for assisting project teams with queries on the guidelines."

4.5.2 Interview Results on Education

In our interviews, we asked the stakeholders several questions on the user education of the guidelines. We asked the stakeholders whom they refer to for assistance on the guidelines. We also asked the stakeholders if the CMB should educate stakeholders on the guidelines and, if so, how to go about this. The following two graphs show the responses of where stakeholders go for assistance with the guidelines:

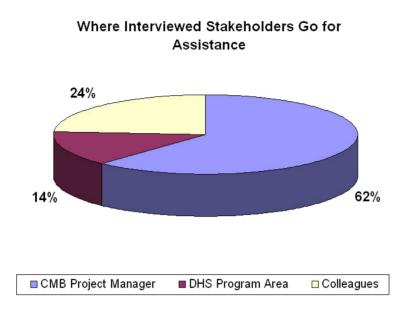
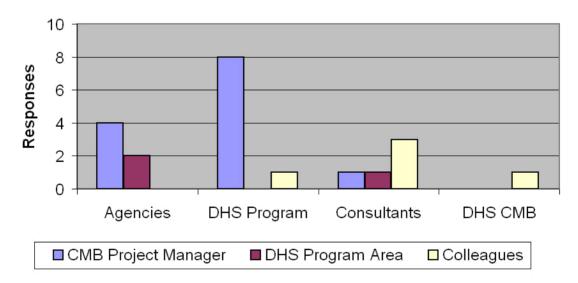


Figure 4.33a: Where Interviewed Stakeholders Go for Assistance

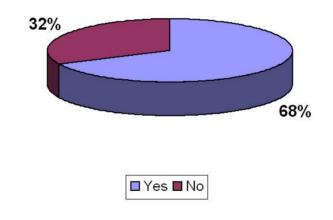


Where Interviewed Stakeholders Go for Assistance

Figure 4.33b: Where Interviewed Stakeholders Go for Assistance

According to the interviewed stakeholders, they ask the CMB staff more often than others to provide assistance on the CDG. Since the CMB project managers take part in all phases of projects and know the most about the CDG, most stakeholders seek help from them. Stakeholders who seeking help from CMB feel satisfied with the assistance they receive. Most of the consultants, however, find it easier to find someone in their office than ringing a CMB project manager so they refer to their colleagues for help. Agencies rely on both the CMB and DHS Program project managers. Some of the stakeholders suggested that a centralised help system might better serve the users, allowing for a single point of contact stakeholders can call and receive assistance without tracking down a particular person.

We also asked the stakeholders whether they feel the need for training on the guidelines for the stakeholders. The following figures show the responses broken down by stakeholder type.



Interviewed Stakeholders' Opinions on the Need for Training/Education on the Guidelines

Figure 34a: Interviewed Stakeholders' Opinions on the Need for Training/Education on the Guidelines

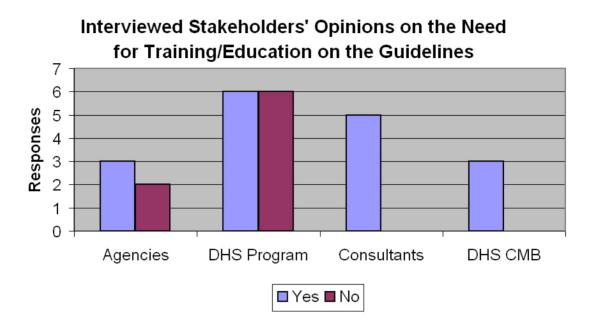


Figure 34b: Interviewed Stakeholders' Opinions on the Need for Training/Education on the Guidelines

The majority (68%) of stakeholders feel the need for some sort of training on the CDG. Most stakeholders consider training essential for newcomers to the system that will assume an active role in the capital project delivery on a long-term basis. Some agency stakeholders think that they do not need training; while CMB staff think training should take place at the Regional level.

Most of the stakeholders stressed that the best form of training on the process comes from experience gained from actually planning and delivering a project. Some stakeholders also stressed the need for training on new sections of the guidelines, such as *1.4 Hospital Project Planning Benchmarks*. The DHS program and the CMB stakeholders expressed a need for the CMB to provide an overview of the project delivery process at the agency level and training on the CDG for the regional staff.

We also asked the stakeholders which method of training they would prefer. The majority of those interviewed prefer seminars as the training method. Some also suggested workshops, induction sessions, and question & answer sessions. One Agency stakeholder suggested having a web-interactive training program. However, some people expressed concerns on finding resources to facilitate these types of training.

4.6 Additional Results

During the course of the project, we produced two unplanned results. These results, while not originally planned as part of our project, have already contributed to the Capital Management Branch. The first result deals with software called eForms and the second concerns a new capital development process flowchart.

4.5.1 eForms

Initially we had intended to host the web survey on a WPI server, however, after meeting with CMB staff, we discovered that due to the DHS IT restrictions it would not be feasible. CMB IT staff referred us to Mathew Kirwan, from the Information Services Branch of DHS who introduced us to a program called eForms. Created for specifically for the DHS, eForms allows users to create numerous types of feedback forms hosted on the DHS server. The server collects the feedback electronically, storing the data in a delimited text file. The file can then be easily imported into common spreadsheet applications for data analysis.

We found that no one in the CMB was aware of eForms. We introduced eForms to the Energy Officer of the CMB, Sarah Bending who has conducted over 100 surveys for the DHS. She was thrilled to find out about eForms and will be using the program for future surveys. After our use of eForms, we have written a review of eForms (see Appendix B), which the ISB will hopefully consider when making future improvements to the program.

4.5.2 Capital Development Procedure Flowchart

In the first two weeks of the project, we met with numerous CMB staff members to gain an understanding of the capital development process. The flow chart that described the capital development process in the CDG had become outdated and lacked some key components, such as the Gateway Review process. We created a new flowchart incorporating the Gateway Review process, as shown in Appendix F. The director of the CMB, Barry Paice, in his presentation to the Netherlands's Board of Health Services, used this chart to display how the Gateway Review relates with the Capital Development Guidelines. Also, the projects managers have found this chart very useful and feel that this chart should be incorporated into the future revisions of the CDG.

4.7 Other Comments

During our interviews, we recorded stakeholders' comments not directly relating to the topics covered in the previous sections. Appendix H lists the comments, sorted by stakeholder type for easy navigation. We paraphrased the responses into condensed, easier to read sentences and phrases, where appropriate.

5. Conclusions

After analysing all of the results, we developed conclusions on each of the topic areas. While we interviewed and surveyed a small non-random sample of a large population, the following conclusions best reflect how the stakeholder population most likely feels as expressed by their peers' feedback. The conclusions within this chapter may not be definitive; they should, prove to be both interesting and useful.

5.1 Access to the Guidelines

Stakeholders show an overwhelming demand for both web and hard copy access to the guideline material. With the increase of networking technology in today's world, stakeholders prefer to access the guidelines through the Web, while showing little to no demand for a CD-ROM. However, stakeholders find access via the web difficult and would like improvements made. Stakeholders' primary difficulty arises from obscure or broken hyperlinks to the CDG material on the DHS Internet web page, making it hard to navigate through the web pages to find the CDG.

5.2 Presentation of the Guidelines

The project also focused on determining how stakeholders currently feel towards the presentation of the CDG. We determined what modifications CMB can make to the guidelines in order to improve how the guidelines communicate information. This section provides relevant conclusions on presentation that we drew from our results.

5.2.1 Low-Cost Projects

The current Capital Development Guidelines assist in delivering low-cost projects that meet the established design and functionality requirements. In some stakeholders' opinions, the guidelines do not currently effectively assist in the planning and delivery of low cost projects, and they feel that a condensed summary of the current guidelines would do a better job. Stakeholders not in favour of the condensed summary feel the creation of a condensed summary would require currently unavailable resources. These stakeholders also feel that a second set of guidelines may confuse stakeholders. Although the addition of a condensed summary might help some, it may also prove to have a negative effect.

5.2.2 Reference Material

Stakeholders feel the addition of reference material, not currently present in the CDG, would better assist with their understanding of the CDG. Some stakeholders expressed that they have had some difficulties with some of the terminology used within the CDG, as well as with the use of acronyms. While a few stakeholders did not think that it would prove useful for them, they still said it would definitely benefit others. In addition, some stakeholders feel an index would prove beneficial to find specific information they require without having to search through the entire guideline series.

5.3 Content

Stakeholders ultimately want to access and interface with the content of the Capital Development Guidelines, as the content defines the entire planning and delivery procedure. As a result, we wanted to evaluate the current material and determine if the CDG contained all the necessary up-to-date material in the appropriate level of detail. This section provides conclusions based on content that we drew from our results.

5.3.1 Level of Detail

Although our survey did not produce distinguishing results, the interviews revealed that an overwhelming number of stakeholders felt that the CDG possess just the right amount of detail. Interviewed stakeholders found the material clear and concise. However, some feedback suggested that the guidelines assume that the user has experience in capital project delivery, and that the CDG contains information biased towards large projects (A\$20-50 million).

5.3.2 The Gateway Review Process

Interviewed and surveyed stakeholders both provided overwhelming support for the inclusion of the Department of Treasury and Finance's (DTF) Gateway Review process into the CDG. We discovered that awareness of the Gateway Review process has increased among stakeholders. Stakeholders feel that since the DTF makes the Gateway Review mandatory for high-risk state-funded projects, the CMB should include information on the process as part of the guidelines. However, respondents expressed mixed feelings on whether they would like the information included as just a reference, a summary, or fully detailed.

5.3.3 Partnerships Victoria

Currently, the CDG briefly summarizes Partnerships Victoria, a procurement strategy, within guideline section 1.1 Policies and Procedures. The stakeholders feel that the Capital Development Guidelines should summarize Partnerships Victoria as they currently do. However, the most frequent response from both the interviews and the survey suggests that the CDG need a reference link to the full details of Partnerships Victoria on the DTF website.

5.3.4 Treasury Corporation Victoria

Treasury Corporation Victoria (TCV), another procurement strategy, specifically provides funding for hospital car parks. The stakeholders we interviewed felt that, while not directly related, the CDG should mention TCV funding so stakeholders know where to find the necessary information. Through the feedback we received, most stakeholders want a summary of the TCV with a reference to where they can find the full details.

5.3.5 Post-Occupancy Evaluations

All the feedback on Post-Occupancy Evaluations (POE) received from the interviews strongly suggests that stakeholders should perform Post-Occupancy Evaluations on capital projects. Stakeholders feel that the use of POE provided an opportunity for all stakeholders to learn from both the positive and the negative characteristics of completed projects, benefiting future project delivery. In other words, POE reports can serve as a guide for stakeholders in future projects. In addition, POE also serves as a self-assessment tool for all stakeholders involved.

Stakeholders agree that in order for the CMB to implement a successful POE process, the CMB needs a central feedback system for the stakeholders to share project information. Also, most of the stakeholders want third party stakeholders to conduct POE's to prevent bias within the evaluations. However, to do this the CMB would have to obtain and allocate resources for conducting POE's, especially if they want POE's on every capital project.

5.3.6 Generic Briefs

The DHS Program areas produce Generic Brief guidelines to provide stakeholders with design standards of facilities produced by the capital development process. From the feedback we received, we found that stakeholders want the Generic Briefs referenced within or incorporated alongside the CDG. The current accessibility of the Generic Briefs needs improvement as the links to the Generic Briefs exist on the CMB intranet site and many of the current links are broken. Additionally, the stakeholders felt that this information should exist readily available on the Web in the same location as the CDG.

5.3.7 Updates

The stakeholders all agreed that the CMB needs to review and update the guidelines with current practices and procedures, pointing out some repetition and overlap within the guidelines. Some of the sections, such as 3.1 Service Planning and 3.2 Business Planning, appear outdated and redundant. As a result, the stakeholders do not typically use the information within the two sections. The two insurance sections, 4.3 Principal Controlled Insurance and 5.2 Construction Insurance also pose problems for stakeholders. To prevent this in the future, most stakeholders would like to see a solid method in which CMB updates the CDG and notifies the stakeholders of changes.

5.3.8 The Checklists

The feedback we received on the checklists reveals that the majority of stakeholders used the checklists within the CDG and overwhelming number of them find the checklists very helpful. Project managers and the consultant use the checklists the mostly because of their high level of involvement in the planning and delivery of capital projects. Stakeholders say the checklists serve as a useful reminder, helping them make sure they complete the required steps during the capital development procedure. However, stakeholders feel the checklists need some marginal improvements, such as added detail.

5.4 Education and Assistance

As the final objective of our project, we sought to determine how the use of education may improve how stakeholders learn and understand the capital planning and delivery process outlined within the CDG. The interviews and survey focused on how users currently receive assistance and their preferred method for assistance for the planning and delivery of capital projects. We also asked questions on how, in the future, CMB should offer education or training. This section provides conclusions on education and assistance that we drew from our results.

5.4.1 Education

The stakeholders we received feedback from felt a need for some sort of education, particularly for stakeholders new to the planning and delivery of capital development projects. Several stakeholders felt a short workshop or a seminar would provide the most effective means. When first introduced to the CDG, we sat with a CMB project manager and received a similar form education. We have found this short, personal session of one to two hours proved far more useful to understanding the CDG than our seven-week background research conducted without direct CMB guidance before beginning the project.

However, many stakeholders testified that the experience of working through a capital project from start to finish, with a colleague's guidance, serves as the best way for new stakeholders to become comfortable with the capital planning and delivery process. In addition, examples of the project reports required in the CDG can assist new stakeholders. Learning by example provides an effective alternative to structured training.

With numerous additions to the CDG over the years, stakeholders feel that the CMB should provide education or training on important new sections to ensure that everyone has the same understanding of CMB expectations. Interviewed stakeholders suggest a seminar format would prove the most effective. However, they stress that notification of new additions to the CDG remains the first step in the right direction.

5.4.2 Assistance

The vast majority of stakeholders from the DHS program area contact CMB project managers directly for help, while most of the consultants find it easier to refer to

their colleagues. Some stakeholders suggest a centralised system where anyone can call designated personnel responsible for providing assistance on the CDG. To create a centralised system would require additional resources, and the stakeholder demand for such a high-level system does not appear to warrant it. However, stakeholders show a high demand for easily navigable online access to receive assistance. A Frequently Asked Questions page and downloadable examples may be sufficient to accomplish this objective.

5.5 Stakeholders' Optimism

Throughout the course of the interviews, stakeholders consistently stressed a common theme: the guidelines work. They emphasised the excellence of the Capital Development Guidelines and the capital planning and delivery process developed by the CMB. From their experiences, they mentioned that they do not doubt the Capital Development Guidelines, and the DHS capital process stands along-side some of the best systems in the world. No matter what issues those interviewed presented, they could not help but stress this.

5.6 The Next Step

Stakeholders show a demand for quite a few changes to the four key areas just discussed. As often is the case, the wants outweigh the resources. Many changes and additions stakeholders want would require a large amount of resources, time, and effort to achieve what may prove to be a trivial benefit. The following chapter, entitled Recommendations, discusses the most economical actions the CMB can take in the immediate and long term to benefit stakeholders of all types.

6. Recommendations

The following chapter presents our recommendations to the Capital Management Branch on how best to improve the CDG. We have arranged this chapter around the four key research topics: access, presentation, content, and education. Within each key area, we have presented both short and long term recommendations for improving the Capital Development Guidelines and the capital project planning and delivery process.

6.1 Access

- Make the links to the CDG online more noticeable.
 - Stakeholders have a hard time finding the Capital Development Guidelines from the DHS internet site, even when using the sites search feature. Having ISB improve the location of the link to the documents provides a very lowcost solution to a critical problem.
- Provide downloadable Excel spreadsheets online.
 - Stakeholders can find example spreadsheets at the back of guideline sections, such as the benchmarking section, but they currently do not have access to these resources electronically. Supplying these resources online alongside the CDG would cost next to nothing and could help keep a consistent format for all reports submitted
- Include Generic Briefs on the same website as the CDG, or at a minimum, have links that work properly.
 - Many stakeholders in the Program areas mentioned that they
 receive many phone calls from consultants looking for design
 guidelines. By providing either the documents themselves or
 working links on the webpage hosting the CDG would
 resolve this issue at next to no cost.

6.2 Presentation

- Include a glossary of terms including both construction terms and medical terms available online and with hard copies.
 - Stakeholders from both the agency and consultant fields have expressed difficulty understanding each other's terminology. Providing a stand-alone glossary as a new guideline section would solve this problem at the cost of compiling and creating the list of terms and their definitions.
- Include a list of acronyms online and through hard copies.
 - As with the previous recommendation, stakeholders want a list of acronyms to reference to avoid confusion.
- Make clear whether CDG are guidelines or standards.
 - Many stakeholders within the DHS Program area and even within CMB stressed that some stakeholders view the CDG as rules to follow. Stating within the guidelines that they should be the baseline, and that stakeholders should pursue more effective, alternative methods when appropriate would help change the paradigm.
- Make clear what is mandatory for all projects
 - Not all stakeholders know the requirements for all the different types of projects.
- Provide examples of all documentation that stakeholders need to submit.
 - Many stakeholders expressed that they learn best through example. Providing sample reports and other documents either online or within the guideline sections themselves will prove a low-cost solution to the problem.
- Interact further with regional and agency staff on what needs to be done to improve the delivery of low-cost projects.
 - Many stakeholders feel that low-cost projects less than A\$10 million suffer a disadvantage in using the CDG. Before thinking of how to provide a separate version for low-cost projects, we recommend educating the regional staff on the

process better. Stakeholders have stressed that the regional staff serve as the weak link in the chain. This may come at a higher cost, as personnel and resources will need to be allocated.

6.3 Education and Assistance

- Include a departmental organisational chart online, including: name, position, and contact information for CMB staff
 - Stakeholders expressed that they often did not know all those in the CMB, except for their immediate CMB project manger. For special issues, they would like to know who could answer their questions and how to reach them. Providing an online organisational chart not only solves the problem, but also serves to publicise the CMB as a whole. The cost of this would be low.
- Develop a way for stakeholder's to submit feedback when they experience difficulties (e.g. Online feedback form/Email contact)
 - Other government organisations in different states have both online feedback forms and designated contacts for assistance. Allowing for a place for stakeholders to provide feedback can prove both beneficial for the stakeholders, but also the CMB. Using eForms and a link from the site with the CDG, the cost to do this would be very low.
- Provide short training sessions for new users to CDG going through the entire process.
 - New stakeholders do not come into the field that often from the consultant side or the DHS CMB or Program side.
 Providing a simple, short seminar for a group of head agency staff and Regional staff about to sit on their first PCG would allow the CMB to establish expectations and bring everyone up to speed. The cost would be medium to high, as it would take

at least one person and time not only conduct, but also prepare the seminars.

- Host seminars when new sections or updates are made to the CDG. These should emphasise how these changes effect the delivery process and why they have been made.
 - Stakeholders expressed that they encounter issues when the CMB publishes new sections. When a section such as benchmarking or asset management becomes final, stakeholders should be informed and educated as to the new expectations they must meet. This would come at a high cost, but would most likely only occur once a year.

6.4 Content

Short term

- Provide links to TCV, PV, and the Gateway Review on the web.
 - Stakeholders both familiar and unfamiliar with these three topics expressed interest in, at the bare minimum, having links to their detailed content. Since the three topics are Treasury programs, they may change without CMB notice, posing a problem if a summary were to be included within the CDG. At next to no cost, providing links on the site hosting the CDG would suffice.
- Remove redundancies between sections/Combine sections
 - Stakeholders have expressed feelings that certain sections (3.1, 3.2, 4.8, 5.1) suffer from overlap and being out of date. Reviewing these specific sections would provide appropriate house cleaning of the CDG that would suffice for quite some time. The cost will be high due to time and labor.
- Notify stakeholders of new sections/changes to the CDG.
 - As stated previously, stakeholders want notification of changes and additions. Having an e-newsletter or a message posted on

the website hosting the CDG would provide the notification they are looking for. This can be accomplished at low cost.

Long Term

- Incorporate procurement strategies in one location
- Incorporate the Gateway Review into the CDG
 - Treasury has made the Gateway Review process mandatory and in the future many DHS capital projects will undergo the process. Having a guideline explaining the process and the expectations of the stakeholders will lessen the blow that will come from sudden exposure to something new and alien. This will come at an average cost, as the information from Treasury can be paraphrased.
- Post Occupancy Evaluations
 - Develop a guideline outlining POE
 - Every stakeholder interviewed agreed that POE's should have a standardised procedure. Producing a guideline will achieve this and the benefits of proper POE's will serve to better the system in the future. Developing the POE guideline and procedure will come at high cost, but have long-term rewards.
 - o Develop a feedback system
 - Currently, stakeholders have no method of providing feedback on the CDG and the process they have to follow. Within the POE, a feedback system can be incorporated that will allow them to voice their opinion in a report. Once POE's are implemented, this will come at only the cost of time.
 - Develop a database for POE
 - Having a centralised data storage system that all stakeholders can access will allow stakeholders to learn from others. Many consultants and some agencies expressed interest in this since many of them have limited experience with only a few types of facilities.

This would come at a high initial and average long-term cost, but has the potential to benefit all.

- Incorporate an index
 - A detailed index would take a long time to develop and at a large cost of time and resources, but would benefit all stakeholders in referencing the CDG. Those interviewed stated they have difficulty finding specific information in a quick and easy manner. An index would solve this problem.

6.5 Final Remarks

We achieved the goal of making recommendations to the CMB, on the CDG, by collecting stakeholder feedback. We hope that the implementation of our recommendations will improve the CDG and the capital development process for all stakeholders in the future. This project will also help the CMB to better serve the stakeholders.

References

- Benson, B. (1970). <u>Critical Path Methods in Building Construction</u>. New York: John Wiley & Sons.
- Bernard, H. Russell. (2002). <u>Research Methods in Anthropology</u> (3rd ed.). Walnut Creek, CA: AltaMira Press.
- Capital Management Branch (CMB). (2001). Capital Development Guidelines. Retrieved January 27, 2004, from the World Wide Web: http://www.dhs.vic.gov.au/capdev.htm
- Cobanoglu, C., Warde, B. & Moreo, P. (2001). A Comparison of mail, fax and web-based survey methods. <u>International Journal of Market Research 43</u>, 441-452.
- Commonwealth Department of Health and Aging (DHA). (2001). The Australian Health Care System: An Outline. Retrieved January 30, 2004, from the World Wide Web: http://www.health.gov.au/haf/ozhealth/ozhesyspf.htm
- Couper, M. (2000). Web surveys: A review of issues and approaches. <u>Public Opinion</u> <u>Quarterly, 64</u>, 464-494.
- Couper, M., Traugott, M. & Lamias, M. (2001). Web survey design and administration. <u>Public Opinion Quarterly, 65</u>, 230-253.
- Department of Human Services (DHS). (2000). About the Department. Retrieved January 31, 2004, from the World Wide Web: http://www.dhs.vic.gov.au/about.htm
- Department of Human Services (DHS). (2002). oz04 Project 7. Retrieved February 27, 2004, from the World Wide Web: http://users.wpi.edu/~jbarnett/oz04/oz04%20Project%207.htm
- Department of Human Services (DHS). (2003). Departmental Plan: 2003-2004. Melbourne: Victorian Government Department of Human Services.
- Department of Infrastructure. (1999). <u>Code of Practice for the Building and</u> <u>Construction Industry</u>. Melbourne, Australia: Department of Infrastructure.
- Department of Public Works (DHS). (2002a). Feedback Form. Retrieved April 2, 2004, from the World Wide Web: http://www.build.qld.gov.au/sam/sam_web/frames/feedback.htm
- Department of Public Works (DHS). (2002b). Strategic Asset Management: Glossary. Retrieved April 2, 2004, from the World Wide Web: http://www.build.qld.gov.au/sam/sam_web/frames/book_gls.htm
- Department of Public Works (DHS). (2002c). Strategic Asset Management: Overview. Retrieved April 2, 2004, from the World Wide Web: http://www.build.qld.gov.au/sam/sam_web/frames/guidelin.htm

- Department of Public Works (DHS). (2002d). Strategic Asset Management: Post Occupancy Evaluation. Retrieved April 2, 2004, from the World Wide Web: http://www.build.qld.gov.au/sam/sam_web/content/75_cont.htm
- Department of Public Works (DHS). (2002e). Strategic Asset Management: Training. Retrieved April 2, 2004, from the World Wide Web: http://www.build.qld.gov.au/sam/sam_web/frames/training.htm
- Department of Treasury and Finance (DTF). (2001a). Gateway: Business Case Development. Retrieved March 15, 2004, from the World Wide Web: http://www.dtf.vic.gov.au/dtf/rwp323.nsf/webnav2/Gateway+InitiativeBusine ss+Case+Development
- Department of Treasury and Finance (DTF). (2001b). <u>Partnerships Victoria:</u> <u>Practitioner's Guide</u>. Melbourne, Australia: Department of Treasury and Finance.
- Department of Treasury and Finance (DTF). (2001c). What is a Gateway Process?. Retrieved March 15, 2004, from the World Wide Web: http://www.dtf.vic.gov.au/dtf/rwp323.nsf/webnav2/Gateway+InitiativeGatewa y+Review+Process
- Department of Treasury and Finance (DTF). (2003a). <u>Gateway Review Process:</u> <u>Background and Guidelines</u>. Melbourne, Australia: Department of Treasury and Finance.
- Department of Treasury and Finance (DTF). (2003b). <u>Leadership Guide</u>. Melbourne, Australia: Department of Treasury and Finance.
- Division of Capital Asset Management (DCAM). (2003). Who We Are. Retrieved February 22, 2004, from the World Wide Web: http://www.state.ma.us/cam/about/ov_who.html
- Faniran, O., Love, P., Treloar, G. & Anumba, C. (2001). Methodological issues in designconstruction integration. <u>Logistics Information Management 14</u>, 421-426.
- Facilites Planning and Management Department, University of Kansas. (2003). PPMR & Capital Improvement Projects: User Guide. Retrieved February 26, 2004, from World Wide Web: http://www.ku.edu/~fmkuhtml/PPMR_Guide/PPMR_UserGuide.pdf
- Fisk, E. (1982). Construction Project Administration. New York: John Wiley & Sons.
- Foxhall, W. (1975). <u>Professional Construction Management and Project Administration</u> (2nd Ed.) New York: Architectural Record.
- Gransberg, D., Badillo-Kwiatkowski, G., & Molenaar, K. (2003). Project Delivery Comparison Using Performance Metrics. <u>AACE International Transactions</u>, CSC.02.1-CSC.02.5.

- Gransberg, D., Ellicott, M. (1997). Life Cycle Project Management. <u>AACE International</u> <u>Transactions</u>, PM.02.1-PM.01.5.
- Goldhaber, S., Jho, C., & Macedo, M. (1977). <u>Construction Management and</u> <u>Engineering</u>. New York: John Wiley & Sons.
- Halpin, D., & Woodhead, R. (1980). <u>Construction Management</u>. New York: John Wiley & Sons.
- Heery, G. (1975). Time, Cost and Architecture. New York: McGraw-Hill.
- Lunsford, A. (2002). The Everyday Writer (2nd ed.). Boston: Bedford/St. Martin's.
- Kuprenas, J. (2002). Performance Comparison of Project Delivery Techniques. <u>AACE</u> <u>International Transactions</u>, PM.02.1-PM.02.5.
- Massachusetts Department of Public Health (DPH). (2002a). Determination of Need Program. Retrieved February 23, 2004 from the World Wide Web: http://www.state.ma.us/dph/dhcq/don.htm#reg
- Massachusetts Department of Public Health (DPH). (2002b). Plan Review. Retrieved February 23, 2004 from the World Wide Web: http://www.state.ma.us/dph/dhcq/plan.htm
- Massachusetts Department of Public Health (DPH). (2002c). Welcome to The Massachusetts Department of Public Health Web site!. Retrieved February 23, 2004 from the World Wide Web: http://www.state.ma.us/dph/
- McNulty, A. (1982). <u>Management of Small Construction Projects</u>. New York: McGraw-Hill.
- National Health Services (NHS), U.K. (2004). Capital and Procurement. Retrieved Feb 25, 2004, from the World Wide Web: http://www.nhsestates.gov.uk/capital_procurement/index.asp
- National Health Services Executive. (1995). <u>Capital Investment Manual: Post-project</u> <u>Evaluation</u>. London: Her Majesty's Stationery Office.
- Nealon, D. (1996). How to achieve improved project results. <u>AACE International</u> <u>Transactions</u>, C&S/M&C.4.1-C&S/M&C.4.4.
- New South Wales Government Procurement Council. (2002). <u>Smarter Buying for</u> <u>Government: New South Wales Government Procurement Reform Strategy</u>. Sydney: Department of Public Works and Services
- O'Reilly Media, Inc. (2004). MySQL & MSQL. Retrieved March 1, 2004, from the World Wide Web: http://www.oreilly.com/catalog/msql/desc.html
- Raymond, Eric S. (2000). The On-line Hacker Jargon File. Retrieved April 6, 2004, from the World Wide Web: http://dictionary.reference.com/search?q=00-database-info&db=jargon

Retherford, N. (1998). Project Delivery and the U.S. Department of State. Journal of <u>Management in Engineering</u>, Nov/Dec, 55-58.

Robson, Colin. (2002). Real World Research. Malden, MA: Blackwell Publishers Inc.

- Sadler, R. E. (2003). Design-Build in the Commonwealth of Massachusetts. Unpublished Master's thesis. Worcester: Worcester Polytechnic Institute.
- Short, J. (1998). Preparing a Proposal for a Build, Operate, and Transfer (BOT) Project. <u>AACE International Transactions</u>, PROF.01.1-PROF.01.5.
- Tech5Corporation, Inc. (2002). How does the Traditional Design-Bid-Build Approach work? Retrieved February 26, 2004, from World Wide Web: http://www.tech5.com/delivery/designbidbuild.htm
- The PHP Group. (2004). Chapter 44: General Information. Retrieved March 1, 2004, from the World Wide Web: http://us2.php.net/manual/en/faq.general.php
- University of California, Berkley. (2002). Project Approval Process. Retrieved February 24, 2004, from the World Wide Web: http://www-pdc.berkeley.edu/ProcessPage2.html
- University of Kansas (KU). (2003). PPMR & Capital Improvement Projects: User Guide. Retrieved February 26, 2004, from World Wide Web: http://www.ku.edu/~fmkuhtml/PPMR_Guide/PPMR_UserGuide.pdf
- University of Massachusetts Amherst (UMASS). (2002). UMass Amherst Pocket Profile 2002. Retrieved February 22, 2004, from the World Wide Web: http://www.umass.edu/profile/index.html
- University of Massachusetts Amherst (UMASS). (2003a). Facilities and Campus Management. Retrieved February 22, 2004, from the World Wide Web: http://www.umass.edu/fp/
- University of Massachusetts Amherst (UMASS). (2003b). The Life Cycle of a Project. Retrieved February 22, 2004, from the World Wide Web: http://www.umass.edu/fp/projinfo/life_toc.htm
- University of Minnesota. (2003). Capital Projects: Developing Capital Projects. Retrieved February 25, 2004, From World Wide Web: http://www.facm.umn.edu/Capital_Projects/cap_projects.htm
- Weible, R.., & Wallace, J. (1998). Cyber research: The impact of the Internet on data collection. <u>Marketing Research</u>, Fall, 19-31.
- Woods, Douglas W. (2001). The Interactive Qualifying Project. Retrieved February 21, 2004, from the World Wide Web: http://www.wpi.edu/Academics/Depts/IGSD/IQPHbook/

- Woods, Douglas W. (2002). Exploring Completed Projects. Retrieved February 21, 2004, from the World Wide Web: http://www.wpi.edu/Academics/Depts/IGSD/Interactions/iqp.html
- World Wide Web Consortium (WC3). (2003). Extensible Markup Language. Retrieved March 1, 2004, from the World Wide Web: http://www.w3.org/XML/

Appendices

Appendix A - Interview Protocol

Interview Protocol

Interview # Recording: Yes NO
Name:
 In the last five years, how many capital projects have you been involved with?
0 1 2-10 10+ 2. Types of facility you have been involved with:
Metro Acute Health Regional/Rural Acute Hospital Sub-acute(e.g.
Rehab Centre)
Residential Aged Care Mental Health Impatient Community Health
Community Mental Health CC Juvenile Justice CC Placement
and Support
Disability Day ProgramDisability AccommodationMental HealthAccommodationAmbulanceOther3. Which size project(s) have you been involved with?
Less than \$5 million \$5 and \$10 million \$10 and \$30 million \$30 and \$50 million Over \$50 million \$30 and \$50 million
 How do you typically access the guidelines when you want to check something: Printed Copy CD-Rom DHS Web Other:
 5. Have you been able to access the guidelines when you've needed to? Y N How can the access of the guidelines to the stakeholders be improve

6. Thinking about when you have used the guidelines in the past,

- Which ones have you used?
- Which are the most relevant to your job?

• How easy to understand are the ones you have used?

····· ··· ··· ··· ··· ··· ··· ··· ···					
Guidelines Section	Have you used this section?	Is it applicable to your job?	How easy is this section to understand?		
1.1 Policies and Procedures	★ 🛛 Yes 🖳 No	Yes No	🕘 Hard 🕘 Fair 🕘 Easy		
1.4 Hospital Project Planning Benchmarks	≭ OYes ONo	Yes No	CHard Fair Easy		
2.1 Project Control Groups	🗯 🛛 Yes 🖳 No	Yes No	CHard Fair Easy		
2.2 Engagement of Consultants	★ OYes ONo	Yes No	Hard Fair Easy		
2.3 Cost Plans	★ (Yes ()No	Yes No	Hard Fair Easy		
2.4 Monthly Reports	★ (Yes ()No	Yes No	🕘 Hard 🔵 Fair 🔵 Easy		
3.1 Service Planning	≭ (Yes ()No	Yes No	◯Hard ◯Fair ◯Easy		
3.2 Business Planning	★ OYes ONo	Yes No	🔵 Hard 🔵 Fair 🔵 Easy		
3.3 Planning Briefs	\star 🕘 Yes 📃 No	Yes No	Hard Fair Easy		
3.4 Master Plan Studies	★ (Yes (No	Yes No	🕘 Hard 🔵 Fair 🔵 Easy		
3.5 Functional Briefs	★ OYes ONo	⊖Yes ⊝No	Hard Fair Easy		
3.6 Feasibility Studies	≭ (Yes ()No	⊖Yes ⊝No	Hard Fair Easy		
3.7 Schematic Design	★ OYes ONo	Yes No	Hard Fair Easy		
3.8 Investment Evaluation Reports	\star 🕘 Yes 📃 No	Yes No	🕘 Hard 🔵 Fair 🔵 Easy		
3.9 Value Management	★ (Yes (No	Yes No	Hard Fair Easy		
4.1 Design Development	★ OYes ONo	Yes No	Hard Fair Easy		
4.2 Contract Documentation	★ Yes No	Yes No	Hard Fair Easy		
4.3 Principal Controlled Insurance	★ Yes No	Yes No	Hard Fair Easy		
5.1 Tendering, Evaluation, Acceptance	* Yes No	Yes No	Hard Fair Easy		
5.2 Construction Insurance	★ OYes ONo	Yes No	Hard Fair Easy		
5.3 Contract Administration	★ OYes ONo	Yes No	Hard Fair Easy		
5.4 Commissioning of Faclilities	* Yes No	Yes No	Hard Fair Easy		
5.5 Managing Contractor OH&S	* Yes No	Yes No	Hard Fair Easy		
Guidelines Section	Have you used	Is it applicable	How easy is this section to		
	this section?	to your job? u	understand?		

In the following table, please select the choices that best represent your feelings and experience with the specific sections of the guidelines.

Any Comments on a specific sections:

7. How do you feel about the level of detail within the guidelines? Do you think it is about right, too vague or too detailed?

- 8. Have you ever used the checklists in the back of the guidelines? Y N
 - Which ones have you used?
 - Which ones are the most useful to you?
 - How useful are they?
 - Do you have any suggestions about how they can be improved?

- 9. Would you find it useful if the CDG have a list of: Acronyms Glossary
 - Anything else: ______
- 10. If you need some assistance within the guidelines, whom do you typically go to for clarification? Colleagues Supervisor CMB PM other: _____
 - How do you feel that you could be better assisted in the use of CDG?
- 11. Thinking about the information you need access to in order to be able to do your job in planning/delivering capital projects, how would you prefer to access that information:
 - Hard copy (as is)
 - Online access to easily navigable information
 - Education or training session
 - Checklists of key activities and requirements

- Other:
- 12. If you would prefer to have some sort of education or training, what form would you prefer that to be in?
 - A workshop or induction program for people new to planning and delivering DHS capital projects
 - Irregular workshops that cover any changes that effect planning and delivery of DHS capital projects
 - A program of regular workshops or training on different components of DHS capital project planning and delivery
 - Other:

13. If involved with small-scale projects (<A\$10 Million)

- a. If involved w/ projects less than \$10 million, did you encounter any difficulties applying the guidelines to low-cost projects?
- b. Do you think a condensed summary of the guidelines would better assist the stakeholders of low-cost projects? Y N
 Do you have any other suggestions on improving the guidelines for low-cost projects?
- 14. Have you been involved in a project that has been through the new DTF Gateway Review process? Y N
 - How do you think the guidelines produced by CMB could help you with understanding?

Should they:

- a) Just direct people to documents and websites that contain the guidance material for the Gateway Review process
- b) Provide a summary of the Gateway Review process
- c) Provide detailed information about what is required in a Gateway Review Process
- 15. Have you been involved in a project that has been through the new Partnerships Victoria process? Y N
 - How do you think the guidelines produced by CMB could help you with understanding?

Should they:

- a) Just direct people to documents and websites that contain the guidance material for the Partnerships Victoria process
- b) Provide a summary of the Partnerships Victoria process
- c) Provide detailed information about what is required in a Partnerships Victoria Process
- 16. Have you been involved in a project that has been through the

Treasury Corporation Victoria process? Y N

• How do you think the guidelines produced by CMB could help you with understanding?

Should they:

- a) Just direct people to documents and websites that contain the guidance material for the TCV process
- b) Provide a summary of the TCV process
- c) Provide detailed information about what is required in a TCV Process
- 17. Post Occupancy Evaluation:

18. Generic Briefs:

From your experience, what other topics do you feel that the guidelines could include in order to make the project planning and delivering better?

Any other suggestions/comments concerning the CDG:

Other Contacts that we can use for our survey:

Appendix B - eForms

To Matthew Kirwin, DHS, ISB

We would like to express our appreciation for your assistance with our developing of the web survey for our project. During the development process, we came across a few areas within the eForms software that we feel could be improved to make the task of developing a web form easier for users in the future. In return for your efforts to assist us, we would like to assist you by presenting our suggestions that we hope you will find beneficial. We have arranged the suggestions by topic area below.

Publicity

The first thing we noticed about eForms was that nobody within CMB had heard of them before. CMB staff have completed web forms within the department in the past without knowing someone generated them using the eForms software. Without knowledge of eForms existence, DHS staff do not benefit from the resources allocated to create and maintain the eForms software.

For instance, Sarah Bending, CMB Environment Office, has conducted numerous surveys as part of her role. Recently, she completed a survey of DHS agencies. She developed the questionnaire for the survey as a Microsoft Excel spreadsheet and emailed it to everyone she needed to provide her with feedback. Unfortunately, Sarah had to compile the data by hand without the benefits of eForms, taking numerous days of tedious work.

In the future, publicising the existence of eForms can increase the user base. With a growth in user base, the chance for more feedback on eForms increases, making it a better product. The ISB should start by informing any IT delegates within offices or anyone acting in such a role as staff typically seeks out their assistance on IT issues. The downside, however, comes from the fact that the current support system for eForms may not handle an increase in support requests.

Technical Limitations

From our creating a rather large questionnaire, we feel we pushed eForms technological limits. At times, our form would take upwards of a minute to save. Since users need to save the document before previewing, they spend lots of time waiting if they have a large form to save. This most likely occurs because most of the processing occurs on the server side, not the client side. While the design of the eForms software may not allow for a change to this method, there may exist opportunities to optimise eForms' performance. We would suggest that, since a third-party develops and maintains eForms, ISB should attempt to discuss with the developers possibility for improvement.

Published Forms

We encountered two major issues when conducting our survey. These two issues prevented many users from actually participating in our web survey, forcing them to fax their responses to us. The first involved the massive size of the URL to the internet version of the eForm and the second involved the link within the web form taking the user to the following pages.

Concerning the URL, when we emailed it to our survey population, their mail clients would chop the link in two. They would attempt to click on the portion that acted as a hyperlink, but not enough of the link existed to function properly. Due to technical inexperience, many users could not handle manually navigating to the web form within their web browsers. As a result, either they gave up or they faxed their responses to us using the PDF version of the questionnaire we attached to the invitation emails.

If they did manage to navigate to the web form, they typically ran into problems. The link to the following page appears as just text at the bottom of the page. The text, in a normal size font, blends in with the text around it. The users apparently looked for more visual cues than just text symbolising the action of proceeding to the next page. Oddly enough, in some of the eForms documentation, screenshots of eForms show a graphic users can click on, not just text.

We suggest that, at the bare minimum, the developers provide a much clearer, more concise way for users to navigate through multi-page eForms. Having a shorter link to the web form would help tremendously, also. However, that limitation most likely lies within the Lotus servers themselves and may not prove easy to change. The URL's need not be extremely short, but maybe 80 characters or so at the maximum to prevent the mangling by mail clients.

Handicapping the Techno-savvy

While eForms lets non-technical people develop technical solutions, eForms also hinders those that do not need the helping hand. Users can add JavaScript functionality, but they cannot easily add their own HTML in places where appropriate. We spent most of the development time on hacking objects to get the code to generate properly, including HTML within the labels of such things as radio buttons and static text blocks. While we did achieve most of what we wanted, it took trial and error.

While this limitation may prove advantageous in preventing users from breaking the DHS web style guidelines and possibly performing malicious acts, it severely cripples the innocent. If the limitation exists for purpose of forcing users to abide by stylistic guidelines, it might prove pointless in the face of the 3-tier approval system. Granted, malicious code could go unnoticed as those approving the eForm might not possess the time or technical knowledge to find something of that manner, but ISB could check for that at the final approval stage.

The Interface

The interface to eForms appears to need some tweaking. From what we experienced, it did not feel intuitive enough for the average user. We do not know the technological limitations on the interface within LotusNotes, but there must exist room for polishing. Some screens prompt the user for large amounts of information and the explanations sometimes do not help very much. Prompting the user for his/her experience and comfort level could allow for eForms to hide certain fields that the average user would not know what to do with. We recommend this as what appears to us as the easiest to implement solution.

Interfacing with the data also proved to be cumbersome. Although we did not have a problem copying the data off the server and importing it into Microsoft Excel, we feel other users would experience great difficulty. We feel that eForms should allow users to access the data through LotusNotes. Since we have very limited experience with LotusNotes, we cannot recommend a more specific solution.

"Features"

Upon analysing our survey data, we discovered some interesting features of our web form. We had used a table created with eForms to organize a large quantity of yes or no questions, some mandatory. The red stars appeared next to the seemingly mandatory questions upon previewing, so we thought nothing of it. However, after we collected the final batch of data, we noticed holes. For some odd reason, the web form did not force respondents to answer those questions. It turns out users can leave every single question within the table blank and still submit their results.

In conclusion, we want to stress that although we uncovered some potential issues with eForms, we feel that eForms helped us greatly with our project. The serverside data compilation alone made eForms definitely worth the time and effort. We would like the thank you again for your time and assistance.

The CMB WPI Team 2004 Dave Voutila Mudassar Muhammad Kerry Dineen

Appendix C - Web Survey

The next nine pages contain the questionnaire for our web survey. We converted the original web version to an Adobe PDF document and attached it to the invitation email sent to the survey population. The invitations can be found in the next chapter, Appendix D.

Gathering Feedback from Stakeholders on the Capital Development Guidelines.



Welcome to our survey on the Capital Development Guidelines.

The Capital Development Guidelines were produced by Capital Management Branch as a practical guide to assist all stakeholders including Department of Human Services' staff, agencies and consultants with planning, organising and implementing capital investment projects.

The guidelines apply to all projects regardless of size, cost, complexity and source of funds and cover each phase in the capital investment process.

Barry Paice, Director of Capital Management Branch, is now sponsoring a project to collect feedback from stakeholders as to how effective the guidelines are in assisting them to plan and deliver capital projects.

The information we gather from you will be the basis for recommendations to the Capital Management Branch on improving the Capital Development Guidelines.

There are six sections to our questionnaire:

- o Demographical Information
- Accessing the Guidlines
- Content of the Guidelines
- Special Topics and Suggestions
- Guidelines Education and Assistance
- Optional) Low-cost Projects

We ask that you please take the time to fill out all sections. Feel free to elaborate as much as possible where allowed in the free response sections. The information you provide will serve to improve the guidelines, hopefully making your job easier in the long term.

If you choose, you may also download a blank copy of the form in Adobe PDF format from the link below and print out the questionnaire. You can fax it back to us at *(03) 9616 2066*.

Thanks for your time,

Kerry Dineen Mudassar Muhammad Dave Voutila

Demographical Information

★ 1. Please indicate the type of organisation you work for:

Agency (Metro hospital)	Agency (Rural hospital)	Agency (Residential Aged Care)
Agency (Other)	Consultant firm (Architectural)	Consultant firm (Cost Consultant)
Consultant firm (Engineering)	Consultant firm (Other)	DHS Program area
DHS Regional Office	DHS Capital Management Branch	

 \pm 2. In the last five years, how many capital projects have you been involved in the planning and/or delivery of?

Zero One Two to Ten More than Ten

★ 3. What size projects have you been involved in the planning and/or delivery of? Check all that apply

Less than \$5 million	Between \$5 million and \$10 million
Between \$10 million and \$30 million	Between \$30 million and \$50 million
Greater than \$50 million	

*** 4. What type of facilities have you been involved in the planning and/or delivery of?** Check all that apply.

Metropolitan Acute Hospital	Regional/Rural Acute Hospital	Sub-acute (eg Community Rehab Centre)
Residential Aged Care	Mental Health Inpatient	Community Health
Community Mental Health	Community Care/Juvenile Justice	Community Care/Placement & Support
Disability Day Program	Disability Accommodation	Mental Health Accommodation
Other		

If Other, what type of facility?

Accessing the Guidelines

★ 1. How did you originally become aware of the existence of the guidelines?

	CMB Project Manager	DHS Website	Supervisor	Colleague	Other		
	If Other, please spec	cify:					
★ 2. How do you typi	cally access the guideli	nes?					
	Printed Copy	CD-ROM	DHS Website	Other			
	If Other, please spec	cify:					
★ 3. Have you been a	ble to access the guide	elines when yo	u've needed to	o?		Yes	No
★ 4. Which medium v	vould you prefer to use	for referencin	g the guideline	es?			
	Printed Copy	CD-ROM	DHS Website	Other			

If Other, please specify:

Content of the Guidelines

In the following table, please select the choices that best represent your feelings and experience with the specific sections of the guidelines.

Guidelines Section		ave you i section?		Is it applic to your job?	able	How easy is understand?	this s	ection to
1.1 Policies and Procedures	*	Yes	No	Yes	No	Hard	Fair	Easy
1.4 Hospital Project Planning Benchmarks	*	Yes	No	Yes	No	Hard	Fair	Easy
2.1 Project Control Groups	*	Yes	No	Yes	No	Hard	Fair	Easy

2.2 Engagement of Consultants	*	Yes	No	Yes	No	Hard	Fair	Easy
2.3 Cost Plans	*	Yes	No	Yes	No	Hard	Fair	Easy
2.4 Monthly Reports	*	Yes	No	Yes	No	Hard	Fair	Easy
3.1 Service Planning	*	Yes	No	Yes	No	Hard	Fair	Easy
3.2 Business Planning	*	Yes	No	Yes	No	Hard	Fair	Easy
3.3 Planning Briefs	*	Yes	No	Yes	No	Hard	Fair	Easy
3.4 Master Plan Studies	*	Yes	No	Yes	No	Hard	Fair	Easy
3.5 Functional Briefs	*	Yes	No	Yes	No	Hard	Fair	Easy
3.6 Feasibility Studies	*	Yes	No	Yes	No	Hard	Fair	Easy
3.7 Schematic Design	*	Yes	No	Yes	No	Hard	Fair	Easy
3.8 Investment Evaluation Reports	*	Yes	No	Yes	No	Hard	Fair	Easy
3.9 Value Management	*	Yes	No	Yes	No	Hard	Fair	Easy
4.1 Design Development	*	Yes	No	Yes	No	Hard	Fair	Easy
4.2 Contract Documentation	*	Yes	No	Yes	No	Hard	Fair	Easy
4.3 Principal Controlled Insurance	*	Yes	No	Yes	No	Hard	Fair	Easy
5.1 Tendering, Evaluation, Acceptance	*	Yes	No	Yes	No	Hard	Fair	Easy
5.2 Construction Insurance	*	Yes	No	Yes	No	Hard	Fair	Easy
5.3 Contract Administration	*	Yes	No	Yes	No	Hard	Fair	Easy
5.4 Commissioning of Faclilities	*	Yes	No	Yes	No	Hard	Fair	Easy
5.5 Managing Contractor OH&S	*	Yes	No	Yes	No	Hard	Fair	Easy

★ 2. Overall, how helpful were the guidelines to your role in planning and/or delivering DHS capital projects?

 Not helpful
 Lacking
 Adequate
 Helpful
 Excellent

 ★ 3. Which phrase best describes how you feel about the level of detail within the guidelines?

 Too general
 Sometimes brief
 Just right
 Sometimes too detailed
 Too complex

4. In the section below, please provide any comments you have concerning the level of detail within specific areas of the guidelines.

Special Topics and Suggestions

Department of Treasury and Finance's (DTF) Gateway Initiative

★ 1. Have you been involved in a project that has undergone the new <i>DTF Gateway</i> review process?		
2. If <i>Yes</i> , do you feel the guidelines should:		
Direct users to the <i>DTF Gateway</i> documents?	Yes	No
Summarize the <i>Gateway</i> process and relate it to project planning and delivery?	Yes	No
Provide detailed information concerning the entire <i>Gateway</i> review process?	Yes	No

Partnerships Victoria

4. If *Yes*, do you feel the guidelines should:

Direct users to the <i>Partnership Victoria</i> documents?	Yes	No
Summarize the <i>Partnerships Victoria</i> process and relate it to project planning and delivery?	Yes	No
Provide detailed information concerning the entire <i>Partnerships Victoria</i> process?	Yes	No

Treasury Corporation Victoria (TCV)

★ 5. Have you been involved with a project that was funded through the <i>TCV</i> program? (eg. carparks)							
6. If <i>Yes</i> , do you feel the guidelines should:							
Direct users to the <i>Treasury Corporation Victoria</i> documents?							
Summarize the <i>TCV</i> process and relate it to project planning and delivery?							
Provide detailed information concerning the entire <i>TCV</i> process?	Yes	No					
 Guideline Checklists ★ 7. Have you ever used the checklists provided within the guidelines? 8. If you have used them, how useful did you find the checklists? 	Yes	No					
Useless Somewhat Useful OK Useful Very Useful							
9. In what ways do you feel the checklists can be improved?							

Other Topics and Suggestions

\bigstar 10. Do you feel a glossary of terms would be useful if included in the guidelines?	Yes	No
\star 11. Do you feel a list of acronyms would be useful as part of the guidelines?	Yes	No

12. Thinking about your experiences with projects, what other topics do you feel the guidelines should include to better assist project planning and delivery of DHS capital projects?

Guidelines Education and Assistance

\star 1. If and when you don't understand something within the guidelines, whom do you typically seek assistance and clarification from?

Colleagues Supervisor CMB Project Manager Nobody Other

If Other, please specify:

\star 2. What would be your preferred method for accessing the information you require to plan and deliver DHS projects?

Referencing hard copy guideline document	On-line access to easily navigable information
Education/Training	Using checklists of key activities and requirements
Other	

If Other, please specify:

3. If you prefer to receive education/training, how would you prefer to receive that education/training?

Workshop/induction program for stakeholders new to DHS capital project planning and delivery Irregular workshops addressing changes that effect DHS capital project planning and delivery Regular workshops/training on components of DHS capital project planning and delivery Other

If Other, please specify:

4. Please list any other comments or suggestions pertaining to receiving assistance or information on the DHS capital project planning and delivery process.

[Optional] Low-cost Projects

If you have been involved with projects that cost less than \$10,000,000, please fill out this section.

1. To what extent do you feel your planning and/or delivery of low-cost (< \$10 million) projects was assisted by the current guidelines?

not at all somewhat sufficiently well greatly

2. Please list any difficulties you may have encountered when applying the guidelines to low-cost projects.

3. Do you think a condensed summary of the guidelines would better assist stakeholders of low-cost projects? Yes No

4. Do you have any suggestions on improving the guidelines for low-cost projects?

Final Comments

Please list any comments and/or suggestions for improving the guidelines that were not addressed within this questionnaire. Also, feel free to comment on the questionnaire as a whole so that it may be improved for future use.

You're almost done! Please provide us with your email address to assist in our data collection efforts. With your email address, we can see who hasn't taken the survey so we can send them a reminder.

Email Address:

For Further Information Contact

Kerry Dineen, Mudassar Muhammad, Dave Voutila DHS Capital Management Branch Ph. 03 9616 2098 Email - dhs@wpi.edu or david.voutila@dhs.vic.gov.au

Appendix D - Email Notifications

Email Notifications

Notification 1:

5 April 2004

Introduction

We are three students from Worcester Polytechnic Institute (WPI), located in Worcester, MA, USA. We have undertaken this project as part of the Global Perspective Program offered by our university and will spend a total of 7 weeks working with Capital Management Branch.

Mr. Barry Paice, The Director of the Capital Management Branch in Victoria, is sponsoring our project.

The goal of our project is to obtain feedback on the Capital Development Guidelines to identify ways that CMB can improve its delivery of information to stakeholders on the process for planning and delivering capital projects. We will present our recommendation to Capital Management Branch, so that they can take steps to ensure they meet the needs of users.

<u>Request for Feedback</u>

As you have experience in the planning and/or delivery of DHS capital projects, we are seeking your input to this review process.

We have developed a questionnaire to uncover potential issues that you may have experienced with the guidelines. You can complete the questionnaire online at:

http://hnb.dhs.vic.gov.au/eForms/eForms.nsf/FormsForPreview/AEB9F1664 1CD0C41CA256E5E007B4A9C?OpenDocument

Otherwise, you may print out the questionnaire attached to this email and fax the completed document back to us. Please take some time to fill out the questionnaire completely, since we will shape our final recommendations around your feedback. If we do not hear from you in a week's time, we will contact you again by either email or telephone.

Please, feel free to forward this email to your work colleagues if you would like them to supply us with feedback.

Contact Information

As we are in Australia for only seven weeks, we need your reply by **9th April** to be able to include your comments in our report to CMB. We are available to answer any questions, concerns, or for you to provide your feedback to us verbally. Below is our contact information (also located in the DHS directory). You can reach us by fax to our project manager, Judith Hemsworth, at the number listed below.

Kerry Dineen Kerry.dineen@dhs.vic.gov.au

Mudassar Muhammad <u>Mudassar.Muhammad@dhs.vic.gov.au</u>

Dave Voutila Dave.voutila@dhs.vic.gov.au

You can reach us Monday through Friday from 9:00AM to 5:00PM at the CMB office:

Phone: 03 9616 2098 Fax: 03 9616 2066

Thank you for completing this survey. We look forward to your comments and suggestions.

Notification 2:

Hello,

On 5th April, we emailed you an invitation to take part in our survey of stakeholders' feedback on the Capital Development Guidelines for a project we are currently conducting, sponsored by Barry Paice, Director of Capital Management Branch (CMB). We have not received a response from you since that date and we would still like your feedback on the Capital Development Guidelines. Your feedback remains crucial to our forming recommendations to CMB for improving the Capital Development Guidelines. Please, take the **20-30 minutes** required to complete the questionnaire.

You can complete the questionnaire online at:

http://hnb.dhs.vic.gov.au/eForms/eForms.nsf/FormsForPreview/AEB9F16641CD0C41CA25 6E5E007B4A9C?OpenDocument

Otherwise, you may print out the questionnaire attached to this email and **fax** the completed document back to us

Please, feel free to forward this email to your work colleagues if you would like them to supply us with feedback.

We are available to answer any questions, concerns, or for you to provide your feedback to us verbally. Below is our contact information (also located in the DHS directory). You can reach us by fax to our project manager, Judith Hemsworth, at the number listed below.

Kerry Dineen Kerry.Dineen@dhs.vic.gov.au

Mudassar Muhammad@dhs.vic.gov.au

Dave Voutila David.Voutila@dhs.vic.gov.au

You can reach us Monday through Friday from 9:00AM to 5:00PM at the CMB office:

Phone: 03 9616 2098 Fax: 03 9616 2066

Thank you for completing this survey. We look forward to your comments and suggestions.

If you have already participated in the survey, we apologize for bothering you with this email.

Notification 3:

Hello,

On 5th April, we emailed you an invitation to take part in our survey of stakeholders' feedback on the Capital Development Guidelines for a project we are currently conducting, sponsored by **Barry Paice**, Director of Capital Management Branch (CMB). We have not received a response from you since that date and we would still like your feedback before our ultimate deadline of this **Wednesday** (22/4/04) on the Capital Development Guidelines. Your feedback remains crucial to our forming recommendations to CMB for improving the Capital Development Guidelines. Please, take the **20-30 minutes** required to complete the questionnaire. **This is your LAST chance to voice your opinions, so don't miss out!**

Attached is an Adobe PDF document containing the questionnaire. Once completed, you can fax the printed questionnaire to 03 9616 2066.

Kerry Dineen Kerry.Dineen@dhs.vic.gov.au

Mudassar Muhammad Mudassar.Muhammad@dhs.vic.gov.au

Dave Voutila David.Voutila@dhs.vic.gov.au

For assistance, you can reach us Monday through Friday from 9:00AM to 5:00PM at the

CMB office:

Phone: 03 9616 2098 Fax: 03 9616 2066

If you have already participated in the survey, we apologize for bothering you with this email.

Appendix E - Interview Summaries/Content Analysis

Interview Summaries:

Interview #1 – Leonie Ryall, Bruce McAsey, and Gerry Grogan (Disability)

3 Small Project Based Program Members

- Projects small scaled under \$5 million
- Guidelines focused more toward larger projects
- Recommendations for small scaled
 - Simplified
 - o Too many checks
 - o Extraneous
 - o More of a streamlined process
 - o Overly time consuming for regions
 - Going outside the guidelines
 - o Delaying services
- 7 Series
 - Engineering risk assessment not typically done
- Sections not used
 - o Value management rarely done
 - o Investment Evaluation superseded by Gateway
 - o Commissioning of facilities not done through guidelines
- CDG are accessed by the NET
 - To hard to find
 - Hard-copies are too old
- Guidelines not to difficult since they been involved for so long (10 + years)
- More simplified checklist
 - This is what you need to do
 - People email them asking what to do next
- Wording difficult depending on users
 - Glossary would be useful
- Not clear- STANDARD or GUIDELINE!!!

- Outdated 6 years
- Gateway training
 - What it is involved
 - Gateway panels currently only way
- Guidelines should refer to Gateway, since unsure if it will be outdated soon
- No training on guidelines learned by working through them
- Work with training on new updates/new people coming into projects
- No training offered
- Go to CMB project managers for assistance
- Refer to CMB a lot to see if things have changed recently and not in guidelines yet
- Helpdesk may be useful for regions
- Planning Brief not used practically, master plan to feasibility
- Business Plan, not used- Business plan within program used
 - o Redundant with service plan
 - o Not useful

Interview 2 - Jim Cozen (Agency) Involved in several size projects around Aged Care

- Demographic
 - o Involved in about 10 projects
 - Involved with projects of at most \$38million
 - o Worked for Aged Care and numerous other facilities but mostly hospitals
- Content
 - Guidelines have universality in the way they describe the project
 - o Shorter version could help the small project
- Access of the guidelines->Internet but also have a hard copy
- Training
 - When initially the guidelines came, there were regional seminars offered. If there were training offered I would take part in it. Seminar is a good method other companies do it as well.
 - For assistance, I go to CMB
- Specific Sections:
 - Planning Brief is useful. Planning brief overlapping is not a criticism on the guidelines.
 - o Business Plan could be redundant, that is something for the Treasury people.
- Other Comments:
 - People should be made more aware of accessibility of the guidelines along with the existence
 - Time to time survey the field and get an idea on how the guidelines stand
 - Make people aware of the guidelines through the internet and publish the reports online
 - Victoria systems is better than other countries and other countries are following Victoria

Other contacts Hank ??? Sessal DeCruz -Western Health Stuart Rollei –Mercy Hospital

Interview #3: Cassie Izzard

- Demographic
 - o Title: Project officer Rural and Regional Health Services
 - o Hospitals, dental clinics, nursing homes, hostels
 - o 20+ projects covering \$5-\$30
- Accesses guidelines online, also refers to hard copies
 - o Continually rings CMB for concerns/updates
- Uses Asset Management primarily
- Benchmarking being used
 - Judith and Randall do it for her
 - To extensive for her
- POE Paper draft provided
 - Not used enough
- Guidelines are detailed just right
- Checklist are effective to her
 - o Service planning needs more development
 - Overly flexible
- Glossary would be useful for unfamiliar users
 - o Acronyms also would be useful
 - o Glossary of terms included in other publications of department
- Implementation of IT has been difficult
- Assistant by calling CMB project managers
- Education
 - Seminar on new sections would be useful
 - o Need to publicize more of new sections/procedures
 - Online help
- Low-Cost
 - To comprehensive for 1 time users, project managers used to help through
 - IT Support poor in remote rural areas
- Links on web are not easy to follow
 - Needs to be more simple
 - If you need more detail, click here...

- PV Worked on Austin
 - o For high level projects with aware consultants
 - o Attended seminar on PV sponsored by Treasury
 - o Brief summary with links would be useful
- TCV
 - Summary with links would be useful
 - o Guidelines should refer to its availability
- Gateway
 - o Training course was offered/didn't attend
 - Template to fill in the details
 - Seeks help from CMB
- POE
 - o Millions invested
 - o Design issues and mistakes never get resolved- can learn from them
 - o Rehiring of consultants that people had issues with
 - \circ 3rd party evaluation
 - o Similar to UK
 - User friendly
- Generic briefs for benchmarking
 - o Need to be publicised better

Interview #4 Brian Billington

- Demographics
 - o About 50 projects past 5 years, \$2-\$50 million
 - o Aged Care projects
 - Makes sure all projects meet commonwealth standards
- Uses guidelines everyday, but doesn't read them
 - o Rarely refers to them
 - o More useful for agency members
 - Refers to just for specific details
 - Thinks more detailed index would be useful
 - Access using the web
- 1.4 Benchmarks
 - o Refer to Randall
- Checklists not referred to, due to familiarity
- Thinks guidelines are written very well
 - 0 Detail level is just right
 - o Written in simply terms so everyone can understand
- Website connections for:
 - o PV
 - o TCV
 - o Gateway
 - Timeline when to have gateway review
- Education
 - Value management training done by CMB Ask Jon Bent, CMB PM
 - Day long seminars would be useful for new sections of guidelines
- Generic Briefs link/referral in guidelines
 - Should possibly be included in guidelines
- Small Projects
 - o Shorter version not needed, CDG covers material well enough
- POE
 - o Don't use consultant that built it! Someone independent of project
 - o To find out what works/What doesn't
 - Written checklists over areas to cover is needed

- Who to consult with
 - Right down to the cleaners and nursing staff
- Functionality of building
- o Also need system to feedback this information

Interview #5 - John Hicks

- Demographics
 - Has been involved with roughly 30 projects in last 5 years
 - o Involved in Regional/Rural Health
 - Project costs range from a couple million to \$50 million
- Access
 - o Doesn't refer to guidelines to do job
- Presentation
 - o Views the guidelines not as rules, but as recommendations
 - If there is a better way of doing something, we should take that approach and not the one in the guidelines
 - Feels the guidelines are clear and well written
 - The weakness of the guidelines is they are written as if the process is sequential when in reality sometimes things occur either out of order or concurrently
 - o A shorter version for low-cost projects is unneeded
 - Not worth the effort
 - Information is already available and accessible within current guidelines
- Training/Education
 - 0 Never had received any training in guidelines use
 - Seminars may be a good idea for introducing benchmarking to newer stakeholders
 - Benchmarking is a very powerful tool
 - Giving examples of benchmarking (case studies) would possibly the best way of educating people
 - Best education is hands-on experience
- Gateway Reviews
 - Understands the principals behind them
 - Has not undergone the DTF Gateway training as of yet
 - o The guidelines should include a summary of the process
 - The process is of great importance

- People should be familiar with the process because it is a DTF requirement
- Partnerships Victoria
 - o Has been "peripherally" involved with PV projects
 - Guidelines should provide a brief summary of the process
- Treasury Corp. Victoria
 - o Has been involved in a few TCV funded projects
 - When the Business Case is being developed, the agencies should be free to pursue alternative means of funding
 - Shouldn't really be included in the guidelines
- Post-project Evaluation
 - o Current post-eval doesn't work.
 - Consultants shouldn't be evaluating own work
 - Results are not being fed back into generic briefs
 - Post-eval should be performed by DHS
 - Feels DHS is sufficiently removed from design/construction that they can be an impartial judge of results
 - Doesn't feel external/3rd party post-eval is necessary
 - Feels evaluation should get down to the staff level
 - Information should feed back primarily into generic briefs as that would provide best benefit in the future
 - Also should feedback to CMB contract managers
 - Should feedback to Program reps
 - Only problem is that post-eval doesn't directly fix any problems found with the project in question, so it's not a cure-all
- Glossary/Index/etc.
 - Adding a glossary, index, and list of acronyms would be great for some people
 - However, wouldn't benefit him because he doesn't need to ever look at the guidelines
- Assistance
 - Goes to colleagues primarily for assistance
 - Will ring CMB people depending on who in CMB can provide most help
 - o Feels this method works and will continue to work

Interview #6 - Diane Storey

- Demographics
 - o Has been involved with 6-7 projects in last 5 years
 - Involved in Metro Health and Aged Care Services
 - Project costs range from a \$20 million to \$30 million
- Access
 - Printed Copy and Hard Copy
- Presentation
 - o Views the CDG as just guidelines so there is flexibility
 - o Feels the guidelines are an excellent resources
 - The guidelines are outdated
- Content
 - o Checklist are helpful
 - Guidelines could include a list of Code/Standards of the buildings for the consultants. (for e.g. Australian Building Code)
 - o Generic Briefs are helpful and should be referred by the CDG
- Training/Education
 - o Never had received any training in guidelines use
 - Seminars may be a good idea:
 - Going over the document could help
- Gateway Reviews
 - o The guidelines should include a summary of the process
 - o Should also identify Gateway as a government policy
- Partnerships Victoria
 - o Guidelines should provide a summary of the process
- Treasury Corp. Victoria
 - Should provide a summary of the process
- Post-project Evaluation
 - o Not well done
 - Should be critically planned for the feedback
 - There should be a concrete feedback system

- Not just negative feedback, but use the positive feedback in other projects
- Could serve as a self assessment for the consultants
- Glossary/Index/etc.
 - Adding a glossary, index, and list of acronyms would be great for some people
- Assistance
 - Will ring CMB people depending on who in CMB can provide most help

Interview #7 - Graeme Sheers

- Demographics
 - o Project Manager sits on PCGs
 - o Works for Rural and Regional Health Program
 - Has been with them for 3 years
 - o Worked on 5 capital projects, 3 state-wide
 - Costs ranging from \$4.5million to \$23million
 - Has been involved with Residential Aged Care, Acute, Primary Care, Community Health, Accident
- Access
 - o Doesn't use the guidelines regularly
 - However, refers to section 1.1 (procedural section) the most for the summary of the procedure
- Presentation
 - o Views the guidelines not as rules, but as a baseline
 - When originally reading the guidelines, he felt they were:
 - Long winded
 - Too many sections
 - o Feels the detail is mainly relevant to CMB project managers
 - Along those lines, feels the Program areas want information primarily on the process to follow
- Training/Education
 - o Never received any formal education
 - Previously worked in supported Residential Services and privatizing nursing homes
 - Before that, held management position within government
 - o Recalls his first hurdle was understanding the capital role
 - As a result, read the CDG
 - Did not start his own project work until roughly a year after joining Program
 - Learned the process from hands-on experience working alongside colleagues who mentored him
 - Feels this method worked very well

- Cannot think of a better way to do it
- Major component of learning and growing was developing a working relationship with the CMB and consultants
- Gateway Reviews
 - o Never been involved with a Gateway Review
 - Feels that internal reviews have been done ad-hoc for \$4.5-5 million projects before the Gateway Reviews were even in place
- Partnerships Victoria
 - o Not involved with any
- Treasury Corp. Victoria
 - o Not involved with any
- Post-project Evaluation
 - None technically to date
 - o Involved with two projects near completion
 - Was involved with a form of evaluation that went all the way down to the nurse manager level
 - Roughly a 6-7 person inspection team consisting of CMB and Project reps
 - It was a pilot-project, so the feedback from the evaluation went into building the Concept Plan
- Generic Briefs
 - Refers to them much more often than CDG
 - Feels they are "only a tool, not a rule" and they are the baseline
 - Consultants typically have difficulty finding them
 - They ring him up and ask for either hard copies or the web link
 - Possibly need to incorporate the location of the CDG and Generic Briefs
- Small Projects
 - Feels that maybe a summary of the process could be useful with links to appendices covering various details (e.g. Aged Care stuff, Dental, etc.) that pertain specifically to the type of project
 - The guidelines are too comprehensive and sometimes people just want the information that is relevant to what they need

- Thinks some people don't use the guidelines that often because they are just too cumbersome
- Glossary & Index
 - Doesn't feel much of a need for any because he doesn't really reference the guidelines much
- The Checklists
 - Finds them very useful
 - They are good as a "prompt"
 - Has his own list of things he needs to do for a project that he uses in conjunction with the checklists.
 - Checklists pertaining to specific types of projects may be useful because they'd be easier
- Assistance
 - Typically goes to colleagues for help
 - o Will ring relevant CMB project manager if needed
 - o Feels that the close working relationship provides good assistance
 - Very open dialogue where people are frank and comfortable and don't hesitate to talk
 - Talks to John Bent a lot
- Contacts
 - Try to contact Tectura (project manager/architect)

Interview Summary # 8 – Mike Powell

Demographic

- Program Area Metro Health and Aged Care
- 10+ Projects
- Mainly Acute Hospitals
 - o More recently residential aged care and sub-acute
- Projects ranging from \$3million \$150million
- Involved with service planning mostly

Access

- Originally accessed using hard copies
- Now access with web
- Important to know that the guidelines exist and how they can be accessed

Content

- Well detailed
- Gives enough to understand what is required, very useful to understand process.
- Service Plan
 - Responsibility of program area, not CMB
 - Website not refined with actual service planning that occurs
 - o Programs have different expectations than what is expected in the CDG
 - CDG should give a brief, clear outline of why a service plan is prepared, what it addresses

Checklists

• Not generally used

Glossary/Acronyms

- Would be very useful.
- Got very confused with acronyms when initially starting work in DHS

Small Projects

• Condensed summary of guidelines would be useful for 1st time users

Gateway

- Fundamental to capital project
- Need established set of guidelines so users can understand the process and how it is incorporated with the CDG

- Shouldn't have to search around Department of Treasury for details
- Should be as detailed as other guidelines
- Include templates
- Currently has poor presentation
- Needs to be readily accessible and match with guidelines

Training

- Had training on gateway review
 - Trained to be a reviewer
 - o Did it to get understanding of process though
- Should be training/Presentation session to take users through the new processes and what the role of each person is
- Once guidelines came out, it was biggest learning tool

ΡV

- Set of guidelines for them/referring to them
- Also let people know they exist
- Cross reference from guidelines to appropriate website

Generic Briefs

- Helpful particularly for functional relationships
- Refers to when dealing with unfamiliar areas
 - o To know what services are associate with those areas

POE

- Make enormous sense
- Would be surprised if no issues/problems existed after 12 months
 - Could learn a lot from them
- Hasn't been involved in one
- Surprised if department organises them
- Should be followed up
 - Reports of the POE feedback should be given to respective program areas for improvement in future
- Focus
 - o Physical Issues
 - o Functional Issues

Interview #9 Paul Dore

Demographic

- Manager of Juvenile Justice
 - 0 Ensures Juvenile Justice (JJ) projects run like JJ facilities
- Been around 14 months
- Involved with all parts of projects, started 1st project w/ functional brief
- Been involved with 1 project w/ 2 components
 - o \$15 million

Access

- Has hard copies but often uses net and refers others to the net
- Agencies and others he's worked with have hard time finding the information

Content

- Refers to figure in 1.1 to refer what part of project he is at
- He applies the guidelines, let's agencies know what he is doing
- JJ has set of design guidelines, could be incorporated with CDG
- Victoria has great JJ service delivery
 - Model for others
- Guidelines are very detailed
 - Guidelines are sometime hard to implement, bars are set to high
 - Its programs responsibility to follow and implement the guidelines, hard to implement

Education

- Learned from project experience from external consultant
- Keep people informed and updated of what's going on
- Update CMB of improvements could be made
- Education needs to be tailored to individual audiences

Presentation

- Guidelines appear to be step by step, one leads into another
 - Generally not the case
 - 0 In practice, doesn't happen way it is
- Restructure guidelines for different stakeholders
 - Important to keep people informed on their level

- Keeps users informed of where they are at with the project
- Only people that need the detail is CMB

Other

- Agency CEOs need to know of the guidelines, maybe a summary of what needs to be done and why (1.1)
- Important to let user groups know of the importance of CDG

Personal Relations

- Hard to get info out of CMB
- CMB needs to ask how they can do things better
 - Have narrow view of how things should be done
 - o Responses from CMB sometimes difficult to work with
 - Don't really tell how to apply
 - o Needs to work collaboratively with programs
- Hard to voice opinions since its such a small voice
- JJ know CMB learn CMB, CMB does not know JJ

One size fits all/not the case

Interview Summary # 10 – Steven Gow

Demographic

- Program Area Metro Health and Aged Care
- Joined the organisation 18 months ago
- Has been involved with 4 projects
 - Costs ranging from \$1.5 million \$60 million
- Involved primarily service planning

Access

- Primarily uses the intranet, but also keeps hard copies for quick reference
- Typically has to reference a portion of the guidelines every 2-3 weeks or so
- The location of the files on-line are too hard to from the outside
 - o Typically hampers access for consultants

Content

- Concerning the Service Planning section
 - Feels the section is under detailed
 - o Feels the section is outdated
 - Program would like to work with CMB to help update the section
- Would prefer if the tables within the Benchmarking document were provided on the web as downloadable Excel spreadsheets
- The level of detail in all other sections is right on the mark

Glossary/Acronyms

• Wouldn't personally use them, but feels they would be beneficial for others, particularly outside sources

Small Projects

• From his experience there are no apparent problems

Gateway

• Has no experience in a gateway review, but definitely feels the process should be incorporated into the guideline series

Training

- Has attended a seminar on the Benchmarking guideline with Judith and Randall
- Feels seminars might not be the right approach towards education and assistance

• Thinks that having a designated contact within the CMB or elsewhere that specialises in answering questions on a certain topic would be beneficial

POE

- Has never been involved with one
- Feels they need to be done
 - They are important to future success
- Should be performed by consultants other than those involved in the design and planning
- Should also include input from staff level with primary focus on functionality

Interview #11 Catherine Mundy

Demographic

- Project Manager
- Involved with over 10 projects
- Involved with following facilities:
 - Acute Health
 - Community Health
 - o Mental Health
 - o Aged Cared
- Projects range from \$2 to \$60 million
- Has been involved with capital projects for 8 years\

Access

- Has hard copies of CDG
- Also has CMB PM provide hard copies to others involved with project

Content

- CDG are describing a complex process
- Guidelines are easy as they can be
- CDG have right level of detail
- Content needs to be updated
- Does not use checklists
- Index, glossary, and acronyms are a good idea

Assistance

- Refers to CMB project manager for help on CDG
- CMB project managers need to know guidelines front to back

Education

- Can't learn the guidelines without experience
- 2-3 hour workshops on specific guidelines would be helpful

Gateway

- Capital process is good, does not think Gateway is needed for CDG
- Needs to be thoroughly included in CDG

PV/TCV

• Needs to be included in guidelines

POE

- Needs to be a formal feedback system to program
 - Allows to act quickly to make necessary changes
- Obvious step that needs to be done
- Need to improve current POE

Generic Briefs

- Guidelines should refer to all Generic Briefs
- They are used for base for the projects

Other

- Formal approval process should be improved
 - o Program should approve design development
 - Program has role throughout the project and after the project is competed
 - CDG should recognize that Program has role throughout the project
 - Current involvement only to schematic design

Overall

- Guidelines have been very useful
- Should be updated and improved
 - Need to update the role of the program and recognize its involvement
- Program has greater role after schematic design

Interview #12 Marie Murphy and David Collins

Demographic

- Architects (Silver Thomas Hanley)
- Involved with over 10 project
- Involved with the following types of facilities:
 - Acute Health
 - Community Health
 - o Mental Health
 - o Aged Care
 - o Metro and Rural
- Projects range from \$5million to \$317million
- Company only does hospitals

Access

- Have hard copies of the CDG/ Net
- David: Trouble finding the guidelines on the net. Hard to navigate through the website

Content

- Uses benchmarking guidelines/ also used by people in Perth.
- 1.4 needs more work. Need to explain how particular benchmark was set
- David: Guidelines are clear and concise, no trouble using it the first time
- There is some repetition in the details and some parts could be combined
- Guidelines were beneficial
- Acronyms, and Glossary is a very good idea
 - o Medical Terms in a glossary would help the architects

Assistance

- Refer to colleagues
- Refer to other reports

Education

- Need to be done for new sections
- Question and Answer sessions would help

Small Scale

• Same amount of writing required in small and large scale projects

- A condense summary would help
- Too much detail required out of Functional Brief

Partnerships Victoria, TCV

- Need to be included in the guidelines
- Provide overview with other requirements that are needed
- Summary describing major points

POE

- Positive thing to do
- Need to have the report back for self improvement
- Should be done objectively
 - Not by another architect
- Not enough POE are done
- Would be very valuable

Generic Briefs

- Guidelines should refer to all Generic Briefs
- Was sent to STH on CD
- Need improvement
- Should be used only as a guideline
- Missing new standards

Other

- CMB not know by health agencies
- Hard Copies are good for people who are computer illiterate

Overall

- Guidelines have been very useful
- Guidelines assume that user is experienced in project delivery
- People are using guidelines outside of Victoria such as Perth

Interview #13 Jarrod McCartney

Demographic

- Architects (JohnStaff)
- Involved with over 10 project
- Involved with the following types of facilities:
 - 0 Hospitals
 - Nursing Homes
 - o Ambulance
 - o Community Care
- Projects range from \$5million to \$50million

Access

- Internet
- Needs to be better

Content

- Section 5.1 needs more development
- Planning and Documentation Phase also needs to be more detailed and improved
- Level of detail:
 - o Some are good
 - Tendering needs more detail
- Checklist
 - o Uses them
 - o Early planning phase are loose, need more thinking through
 - o Tendering one is good
 - o Checklist must include everything that is needed
- Acronyms and Glossary
 - o Should be included as a standalone document for all the guidelines
- Should have links that tell you what document to go to.

Education

- Need to be done for new sections
- Working session for those who are involved
- Get people in one place to do the training
- Regular induction session would be good

Small Scale

• Guidelines are good for small scale projects

Partnerships Victoria

• If it will continue then, PV needs to be included in the guidelines

Generic Briefs

- Provided by PM
- Need to be on the website

Interview #14 - Sharon McNulty

- Demographics
 - 0 Infrastructure manager for Northern Health
 - However, employed by Melbourne Health
 - In charge of 32 different services
 - Has been involved with projects in the \$12-50 million range
 - o Has only been involved with stage 1 of projects
 - o Has sat on numerous PCGs and leads user groups
- Access
 - o Was originally given a hard copy when first started using guidelines
 - o Currently uses hard copies and web copies
 - Finds website hard to navigate
- Training/Education
 - CMB should host a 1-2 hour guideline summary seminar for people in the agency level that will be contributing to PCGs
 - Head engineers of facility, infection control specialists...
- Gateway Reviews
 - o Has not been involved with any
- Partnerships Victoria
 - o Has not been involved with any
- Treasury Corp. Victoria
 - o Introduced to by Alan Stokes, CMB
- Post-occupancy Evaluation
 - o Has performed one 18 months after project completion
 - o Shared the results from the POE with consultants
 - Included both positive and negative aspects
 - Report should be kept short
 - A major hurdle to performing POEs would be funding and time
 - Have to pay consultants for time spent evaluating
 - Time must be taken from staff and others interviewed
- Glossary & Index
 - o Acronyms can have different definitions across different organizations

- o Having a internet-based acronym list would help most
- o Glossary would be helpful
- Assistance
 - Usually rings a CMB member
- Contacts
 - o Tony Reed from Silver Thomas Hanley
 - o Atkinson's Project Management
 - Angelo DiGrazio
 - Jarred Skews

Interview #15 - Natalie Morrison

Demographic

- Work as architects for Bates Smart
- Have performed more than 10 projects in last 5 years
 - Costs range from \$2-60 million
 - o Facilities include metro and rural acute hospitals

Access

- Typically use hard copies
- Find website hard to navigate
 - Have difficulty finding generic briefs

Content

- Feel an index would be most useful in their finding information in design and procedural guidelines
- Feel there is not enough detail on putting together functional briefs
- Unclear about Master Plan and Master Plan Review

Assistance

- Have had questions on the guidelines in the past
 - o Recalls talking to Judith
 - Feels problem was not resolved effectively
- Feel there should be a designated person to ring, or even a designated group Education
 - Took part in a seminar on Investment Evaluation in the past
 - Have also taken part in seminars for Value Management roughly 6 years ago

Gateway

- Have been involved with first Gateway
- Were given only an info packet by Treasury
- Feels the Gateway Review process should be summarized and included in guidelines
 - Feels this "Absolutely"

Partnerships Victoria, TCV

• Have not been involved with PV or TCV

- For PV, feels there should be a benchmark PV projects should follow to ensure facilities are built with quality components
 - For example, toilets

POE

- Has performed one 12 months after a project
- Feels a 3rd party should be reviewing
- Questions who should be responsible for seeing POE performed: Principal Consultant or Project Manager
- Feels POEs should get down to staff level
- A problem with performing POEs may arise from architects and engineers trying to protect intellectual property

Generic Briefs

- Should include briefs for dental facilities
- Should also include information about incorporating university integration with hospitals (teaching facilities)
- Not detailed enough for radiology
- Need ESD guidelines (Environmentally Sustainable Design)

- Peer-review during Design Development
 - o Done in New Zealand
 - Have taken part in a peer-review
 - o Feels they should be done to ensure quality design
- For future website
 - Include organisational chart of CMB with names, titles, phone #'s, emails

Interview #16 Be' Steegstra

Demographic

- CMB project manger
- Done about 30 projects in last 5 years
 - Costs range from \$2-\$27 million
 - o Facilities Type: Aged Care

Access

- Typically use hard copies
- Find website hard to navigate
 - Simpler links would help
- 2 Sets of guidelines, one in F Drive and one on the web (web one might be outdated)

Education

- New people joining the department can be provided with a summary sheet
- They could be told who to contact for help

Gateway

- There should be new guidelines specific to gateway
- If the gateway is a long term process then if needs to be incorporated into CDG

TCV

• Thinks TCV is not totally relevant to the CDG

POE

- No one does it
- Two issues
 - POE is in the guidelines but is not carried out
 - 0 If they are done, there is no system in place for feedback
- POE can be useful

- Outdated:
 - Extensive process to update the guidelines
 - Getting someone to regularly update the guidelines would require resources

- Let them run for five years and then update them would work and be cost effective
- Glossary & Acronyms
 - Would be useful for new people
 - Would need to be updated frequently to keep pace with new terms introduced in the process
- Index
 - One person's view of the work
 - Can be difficult to use if not properly made
 - Could be useful if properly done

Interview Summary #17 -- Richard Petty

Demographics

- 10 + projects (almost 400)
- Range from \$500,000 to \$100 million
- Metro Acute Hospital

Content

- Great documents
- Good level of detail
- Doesn't use checklist
- Glossary/Acronyms not useful for him
- Give a level of understanding for all those involved

Assistance

• CMB Project manager if anyone

Education

- Seminars for new people to system
 - Introduction to the guidelines

Small projects

- Work fine
- Condensed would confuse things more

Gateway

• Let them settle down before applying to guideline documents

\mathbf{PV}

• Full level of detail

TCV

- Just how to approach the funding
- Not to relevant with guidelines

POE

- Absolutely crucial
- Done with all projects >\$500,000 within hospital
- Can learn from mistakes
- Would have to limit how many are done

Generic Briefs

- Good idea as guidelines
- Are needed for projects

Other

• Need to be revised, every 5 years or so, to make sure all material is relavent

Interview #18 Rob Tursi

Demographic

- Architects (Lyons)
- Involved with over 10 project
- Involved with the following types of facilities:
 - o Metro Acute Health
 - o Sub-Acute
 - o Extended Care
- Projects range from \$5million to over \$50million

Access

- Hard copy
- Internet
- No complains

Content

- All the sections are easy to follow and very straight forward
- It is a guideline and should be viewed as such
- Can be modified for specific requirements
- They are a benchmarking tool to control expectation level
- Checklist
 - o Uses them
 - 0 Just to make sure reports contain all the required parts
 - o Finds them useful and as a good tool
 - Marginal improvements can be made
- Acronyms, Glossary, and Index
 - All three would be useful, especially for those not familiar with new terms
 - o Index would assist in locating information

Assistance

- Rings Program person
- CMB as well, person who is handling project
- (There are different) degrees of interpretation that are sometimes difficult to assess and lack of experience to understand implications of certain decisions (by some DHS people).

Education

- Introduce new sections in a brief session
 - o Make sure the interpretation is done the way CMB would like

Small Scale

- No difficulties
- Condense summary wouldn't help and may omit relevant information

Partnerships Victoria

• Should be included into the guidelines and should be referenced

POE

• Pointless if all parties are not provided feedback both positive and negative

Generic Briefs

- Have hard copies
- Have disks
- Need to be referenced by the guidelines
- Excellent tool for benchmarking but has to be viewed as a guidelines and can be bend to fit the specific need of a facility

- An in house training in DHS to get consistency in interpretation
- People with more experience interpret it differently
- Some make it more difficult then it has to be
- Project experience is the key to interpretation
- Should be viewed as a guideline and not document of Dogma benchmarking

Interview Summary #19 - Ray Joppich

Demographic

- CMB Staff
 - Sometimes acts as a project manager
 - Responsible for guideline series 7 (fire protection)
 - Series up for review this year
 - Last released in 1997, republished in 2001
 - Looking to have update version for publishing in 2005
- Involved with over 10 projects

Access

- Uses both Internet and hard copies
- When consultants ring Ray for access to guidelines, he points them to the web address

Content

- Ray's personal criticisms on the guideline series:
 - o Big
 - o Bulky
 - Large-project oriented (\$20-50 million)
- As for Asset Management:
 - o There are no examples of asset management plans
 - There are differing opinions on the asset management portion of the CDG
 - John Bentivoglio would usually tell stakeholders not to bother
 - Randall would prefer stakeholders perform it

Education

- DHS Regional staff have high-turnover and don't know much of CDG and CMB
 - Feels there should be seminars on the CDG process for Regions
 - Feels that there exists a possible fear of the CMB and the CDG amongst the regions
 - The problem is finding resources for the seminars

• Feels there should also be advertising of the CMB and it's policies to the Regions Small Scale

- There should exist a separate guideline series for small-projects
 - 0 Not really a summary, but an alternative procedure
 - o Regional DHS staff would benefit from small-scale guidelines
- The reason small projects should be allowed their own guideline is because of the low financial risk involved

Check Lists

- Feels they are useful for consultants primarily
- Does not typically use them himself

POE

- Performed one recently for state-wide forensics unit
- POE's are performed on all fire protection related projects
- POE process was originally spelled out in the Consultant Brief guideline
 - Removed 3-4 years ago
 - Called for consultants to POE their own work
 - Were not being performed
- In the past, has performed POE's for a dozen projects
 - Used outside consultants to evaluate projects
- The main reason POE's are not performed nowadays is resources
 - There is no funding allocated to performing POE's
 - There is central data repository for resulting POE reports

Interview Summary # 20 – Bruce Cook

Demographics

- 5 projects (last 5 years)
- Range from \$3million to \$24million
- Primarily Residential Aged Care, acute/sub-acute health
- Bruce Cook & Associates
- Consultant PM

Access

- Got hard copies
- Uses web to print out updates

Content

- Deals with all areas of guidelines
- Thinks everything can be improved
- Guidelines should be considered as guidelines and not regulations
- There is some repetition, but that is needed to make the guideline work
- Level of detail in the guidelines is sufficient
- Checklists:
 - o Does not uses frequently
 - They are useful, helps confirm that the requirements are met
- Glossary/Acronyms/Index
 - o Occasionally would be useful for him
 - More useful for those that are new in the industry
 - o Index would be helpful to find information faster

Assistance

- Not needed
- Usually seeks colleagues
- Call CMB Project manager occasionally

Education

- Important to let people know that there are changes
- Workshops would help if there is a significant change
 - o Explaining why changes have been made would help

• If there are updates, email could be use to inform people and should make it clear that it is not a spam

Small projects

- Work fine
- No need for condensed summary, it could cause confusion

Gateway

- Just heard of it yesterday
- If it is going to be a long term, it should be included in the guidelines

ΡV

- If it is going to be developed under health projects, it should be included into the guidelines
- Guidelines should embody the principles of PV

TCV

• Should be included because it is generated by what the Treasury hands out

POE

- Good concept, not delivered
- Learn lessons
- People who do the next job don't get the education of previous experiences
- Conclusions need to be transferred over
- POE needs to take place and information needs to be passed on
- Team doing POE needs to have an open mind when conducting POE
- People should admit it there way a wrong decision made

Generic Briefs

- Good principal
- Residential Aged Care Generic Brief
 - Thinks have been put together with out user involvement
 - o Workable document and provides ground rules
- Problems but they can work through them
- Make sure people have the latest version
 - Was working with version 1 and did not know that the latest version was 7.
- Not sure if they are available on the net

Overall

- Guidelines have to be an evolving document, changing w/ polices and regulations
- Let people know what guidelines and not mandatory document
- "They are better than nothing."
- Not all black and white, some grey areas are involved in the guidelines
- Needs to be changing and updating the guidelines but not everyday
- Guidelines across different states, in Australia, should have some uniformity

Interview Summary # 21 – Randal Garnham

Demographics

- 15 to 20 projects (last 5 years)
- Range from \$10million to \$400million
- Metro Acute health, regional/rural acute hospital, sub-acute, residential aged care, mental health impatient, community health, community mental health, mental health accommodation
- CMB PM

Access

- Have hard copies
- Uses web for the updated parts

Content

- Found content bit light in 5.4 Commissioning of Facilities and 5.5 Managing Contractor OH&S
- 3.2 Business Planing not much done these days
- Level of detail is fine in most of the sections
- Checklists:
 - o Uses as a reminder for the consultants
 - o Good to make sure all requirements are met
 - Handy reference
 - Need to be readily accessible on the web
- Glossary/Acronyms
 - o Essential for new comers to the system
- Communication is the key reason why development of guidelines need to get up to speed quickly

Assistance

• Other CMB PM

Education

- Important for people that will be involved in the process long term (i.e. Regional Staff, Program Staff, and Consultants)
- Not important for people in the agencies who are involved in the process for a shot time

• In PCG meetings, overview of the procedure can be given and an explanation of how each thing works

Small projects

- Not sure
- Condensed summary could help projects like residential accommodation

Gateway

- Needs to be addressed in the guidelines
- Need DHS condensed version and refer to DTF website

ΡV

- PV Projects being delivered through Metro Health
- Need to incorporate flags: for procurement at early stages defining who has what role

TCV

- Guidelines should refer to TCV
- DTF website has detail information about regarding TCV

POE

- Definitely need to do them
- After 12 months of the facility, need to examine that if the project met all expectations
- Not just architectural
- Look at similar facilities done before, learn from what has been done
- A 3^{rd} part should do the POE

Generic Briefs

- Being developed through program areas and CMB
- Should be referred to in the functional brief
- Lots of broken links to Generic Briefs website
- Need to put all on CMB website

- Guidelines need to be clear on which parts are mandatory and which are not
- Better approach for putting the guidelines on the web can get rid of repetition and surplus material
- Clear Feedback System on the web to make update in the future

- Needs to be changing and updating the guidelines but not everyday
- Guidelines across different states, in Australia, should have some uniformity

Interview Summary # 22 – Evi Kadar and Tom Barresi

Demographics

- Melbourne Juvenile Justice Centre --agency
- One Project of \$13.5million
- CEO and Facility & Administrative Manger

Does not use the guidelines much. Rely on DHS Program Project Managers to handle the guidelines!

Access

• Website would be the best

Content

- Checklists:
 - o Useful reminder
 - Helps make sure everything is done
- Glossary/Acronyms
 - Both would be useful
- Should be updated with new policies and regulations

Assistance

• DHS Program PM deals with the project

Education

- Workshops would help new people like consultants understand new procedures
- Not needed for Melbourne Juvenile Justice Centre

- Guidelines should describe the dynamics of the steering committee
- Roles of the members on the steering committee, CMB PM, DHS Program, Agencies, Consultants, and others, should be clarified in the guidelines.

Interview Summary # 23 – Alma Adams

Demographics

- 2 Projects of \$10.5 million and \$18 million
- Residential Aged Care and Disability Accommodation
- CEO of Kew Residential Services

Access

- Uses internet to access the guidelines
 - o No complains on access

Content

- Section 5.5 Managing Contractor OH&S
 - o Needs improvement
 - Not clear
- Level of detail is adequate and sometimes there is repetition
- Checklists:
 - o Did not use it
- Glossary/Acronyms
 - Absolutely, both would be useful
 - For others as well
 - Some Acronyms are just specific to Victoria, so people coming outside of Victoria would find it useful as well

Assistance

• CMB PM

Education

- Would be helpful
- Could be done through some sort of web interactive program

Gateway

• Gateway process most likely will go through changes, then put it in.

ΡV

• Provide a summary of PV and have links to detail PV information

TCV

• Provide a summary of TCV and have links to detail TCV information

- At the agency level, generally, people are unaware of CDG and CMB
- Some kind of a booklet describing what CMB do and how CDG work, would help people become aware of the existence of both
- A booklet could also be used as marketing tool for CMB

Interview #24 – Ben Gelnay

Demographics

- 10 + projects
- All types of facilities
- CMB project mangers
- Wide range of capital size

Access

- Uses electronic version on F drive
- Refers others to web
 - o Fire Risk not there, have to locate somewhere else
 - All guidelines need to be in same location
 - Contract, housing/non-housing, generic briefs
 - People outside don't go looking for CMB
 - Need to get info off web through logical steps
 - o Location can't be hidden

Content

- To much variety- Detail to much for some, to superficial for others
- All need to broad approach and have detail for those who need it
 - o Cost planning is terrible
- PV/TCV/Gateway- To temporary to include
- Inconsistency between guidelines exist
- Outdated
 - o Need method to ensure consistency/accuracy with guidelines
 - o Biggest problem is it hasn't been given resources
 - o Guidelines need to be recognised like a project is
 - High Demand for updates
 - Need to reflect changes in regulations and government policies.
 - Someone needs to track changes and build them into guidelines
- Most critical sections are 1.1, 2.2 and whatever one you are using for project

POE

- Needs to be done on systematic basis
- Concentrate on service delivery as well as physical

- Need proper resources
 - o Make changes based on what POE uncovers
- Project managers nee to look at past projects instead of going by what their last project was
- Process for continuos improvement
- Lessons can always be learned

Resources

- Need someone to maintain guidelines
 - Find what needs to be changed, make changes
- Glossary/Acronyms/Index
 - All very useful
 - Perhaps FAQ

Workable templates that can be downloaded would be useful.

Interview Content Analysis by stakeholder type:

Key: (Number of people responding to this category) [Number of people in favour of this idea]

Agency Feedback 6 (interviews 2, 14, 17, 22(2 people), 23)

Access (6)

- Web [4]
 - Use Print as well [3]
- Difficulty using the web [1]
- Does not uses the guidelines [2]

Content

- Level of detail (3)
 - Not enough [0]
 - 0 Just right [3]
 - Some repetition in the guidelines
 - Great document
 - \circ Too much [0]

o Gateway (2)

- Have been involved in one [0]
- A summary should be included [0]
- There should be new guidelines specific to Gateway [0]
- Links should be provided [0]
- Should not be included [2]
 - Let it settle down and then apply to guidelines
- o PV (2)
 - Have been involved in one [0]
 - A summary should be included [1]
 - Links should be provided [1]
 - Full Level of detail [1]
 - Should not be included [0]

- TCV (3)
 - Have been involved in one [0]
 - o A summary should be included [2]
 - Just how to approach the funding
 - Links should be provided [1]
 - Should not be included [1]
 - Not relevant to the guidelines
- o Checklists (3)
 - o Uses them [1]
 - Uses them as a reminder
 - Helpful in making sure everything is done
 - o Does not use them [2]
- POE (2)
 - Have been involved in at least one [1]
 - Shared results with consultants
 - Included both positive and negative feedback
 - Should be done [2]
 - Can help learn from mistakes
 - Report should be kept shout
 - Major hurdle to perform POE would be funding and time
 - Would have to limit how many are done
 - There needs to be a system for POE [0]
 - Should be done by 3rd Party [0]
- o Generic Briefs (1)
 - Should be referenced in the CDG [1]
 - Difficulty accessing on the web [0]
- o Reference Material (5)
 - Glossary would be useful [3]
 - Acronyms would be useful [3]
 - Internet-based Acronyms list

- Index would be useful [0]
- No Need [1]
- o Outdated (3)
 - CDG need to be updated [3]
 - Need to be revised every 5 years to make sure all material is relevant
 - Particular Sections (2)
 - Business Plan is redundant
 - Planning Brief is useful
 - 5.5 Managing Contractor OH&S need more work and are not clear
- Training/ Education (6)
 - Training needed [3]
 - Seminars as method of training [3]
 - Training for agency people that will be contributing to PCGs
 - Training for people who are joining the department for long term
 - A web Interactive Education [1]
 - Training not needed [2]
 - For agencies
 - o Assistance
 - Refer to CMB PM [4]
 - Refer to DHS Program Project Manager [2]
 - o Presentation (3)
 - Small Scale Projects
 - Short version of the CDG could help [1]
 - Short version will not help [2]
 - Could cause confusion
 - o Other Comments (5)

- CMB need to publicise the accessibility and existence of the guidelines
 - By use of Internet and some sort of booklet
- Time to time survey the filed on the guidelines
- Publish project reports online
- CMB needs to market itself at the agency level
- CDG should define the roles of each member of steering committee, the consultants, agency staff, DHS Program staff, and CMB staff

Consultant Feedback 12 (interviews 12(2 people), 13, 15 (2 people), 18, 20)

Access (7)

- Web [4]
 - o Use Print as well [3]
 - Hard copies are good for computer illiterate people
- Difficulty using the web [3]
 - o Generic Briefs as well
- Does not uses the guidelines [0]

Content

- Level of detail (4)
 - o Not enough [0]
 - o Just right [4]
 - Clear and concise
 - Assumes experience in project delivery
 - \circ Too much [0]
- o Gateway (2)
 - Have been involved in one [0]
 - A summary should be included [2]
 - There should be new guidelines specific to Gateway [0]
 - Links should be provided [0]
 - Should not be included [0]
- o PV (7)
 - Have been involved in one [0]
 - A summary should be included [7]
 - Need to provide overview with requirements
 - Need to be benchmark to ensure quality components in facilities
 - Links should be provided [0]
 - o Full Level of detail [0]
 - Should not be included [0]

• TCV (3)

- Have been involved in one [0]
- A summary should be included [3]
 - Need to provide overview with requirements
- Links should be provided [0]
- Should not be included [0]
- o Checklists (2)
 - o Uses them [2]
 - Uses them as a reminder
 - Helpful in making sure everything is done
 - \circ Does not use them [0]
 - o Other comments:
 - Must include everything that is needed
 - Early Planning phase is loose
 - Marginal improvements are needed
- POE (6)
 - Have been involved in at least one [0]
 - Should be done [6]
 - Needs to get down to agency staff level
 - Very valuable learning tool
 - There needs to be a system for POE [4]
 - Should be done by 3rd Party [4]
 - Need person with open mind
 - Should be done by that projects' principal consultant or project manager
 - [2]
- Need person with open mind
- o Generic Briefs (6)
 - Should be referenced in the CDG [3]
 - Should refer to all Generic Briefs
 - Can be outdated
 - Difficulty accessing on the web [2]

- Reference Material (5)
 - Glossary would be useful [5]
 - Should also include medical terms
 - As a standalone document w/ Acronyms
 - Acronyms would be useful [5]
 - Internet-based Acronyms list
 - As a standalone document w/ Glossary
 - Index would be useful [5]
 - With links referring to which document to go to
 - To Find information in design and procedural guidelines
 - o No Need [0]
 - o Other comments:
 - Reference material is useful especially for those unfamiliar with the process
- o Outdated (3)
 - CDG need to be updated [3]
 - Repetition in the guidelines
 - Some sections could be combined
 - Repetition is needed to make guidelines work
 - Should let people know of the changes
 - By email
 - Particular Sections (3)
 - Benchmarking guidelines need to explain how the benchmarks were set
 - 5.1 needs more development
 - Planning and Documentation phases need more detail
 - Tendering needs more detail
- Training/ Education (6)
 - Training needed [5]
 - For new sections
 - Workshops [1]

- Induction session [1]
- Q&A session [1]
- Seminars as method of training [2]
- In house training needs to be done, in DHS, to get consistency on interpretation of the guidelines
- A web Interactive Education [0]
- Training not needed [0]
- o Assistance
 - Refer to CMB PM [1]
 - There needs to be a general person to ring in CMB
 - Website should include organisational chart with names, job title, phone and fax numbers, and email
 - Refer to DHS Program Project Manager [1]
 - Refer to Colleagues [3]
 - Also refers to previous project reports [2]
- o Presentation (5)
 - Small Scale Projects
 - Short version of the CDG could help [2]
 - Too much detail required out of functional brief for small scale projects
 - Same amount of writing involved for large scale projects
 - Short version will not help [3]
 - o Could cause confusion
 - o May omit necessary information
- Other Comments (5)
 - People are using the CDG outside of Victoria (Perth)
 - Guidelines assume experience in project deliver
 - It is a guideline and should be viewed as such

DHS Program Feedback 12 (Interviews 1 (3 persons), 3, 4, 5,6,7,8, 9, 10, 11)

Access (12)

• Web [10]

• Use Print as well [5]

- Difficulty using the web [6]
- Does not uses the guidelines [2]

Content

- o Level of detail (5)
 - Not enough [0]
 - o Just right [5]
 - Written in simple terms so all can understand
 - Easy to follow
 - \circ Too much [0]
- o Gateway (10)
 - Have been involved in one [0]
 - o A summary should be included [2]
 - Templates to fill in details would be useful
 - There should be new guidelines specific to Gateway [3]
 - Links should be provided [3]
 - Should not be included [0]
- o PV (7)
 - Have been involved in one [0]
 - A summary should be included [3]
 - Links should be provided [3]
 - Full Level of detail [2]
 - Should not be included [0]
- o TCV (6)
 - Have been involved in one [0]
 - A summary should be included [2]

- Links should be provided [2]
- Full Level of detail [1]
- Should not be included [1]
- o Checklists (9)
 - Uses them [6]
 - Should be more simplified
 - Helpful in making sure everything is done
 - Does not use them [3]
- POE (8)
 - Have been involved in at least one [0]
 - Should be done [8]
 - Can help learn from mistakes
 - Report should be kept shout
 - Major hurdle to perform POE would be funding and time
 - Need to cover all types of facilities
 - There needs to be a system for POE [8]
 - Should be done by 3rd Party [4]
- o Generic Briefs (5)
 - Should be referenced in the CDG [5]
 - Difficulty accessing on the web [1]
- Reference Material (9)
 - 0 Glossary would be useful [8]
 - For unfamiliar users
 - o Acronyms would be useful [4]
 - Got very confused when initially started
 - Index would be useful [3]
 - o No Need [1]
 - Guidelines are enough
- o Outdated (5)

- CDG need to be updated [5]
 - Frequently rings CMB for updates
- o Particular Sections (6)
 - 7 series- Fire Risk Assessment not typically done
 - Value Management not done
 - Investment Evaluation superseded by gateway
 - Commissioning of facilities not done
 - Benchmarking:
 - Overly extensive for job
 - Would like tables of Excel Spreadsheets downloadable off the web
 - Implementation of IT has been difficult
 - Juvenile Justice has set of guidelines that could be incorporated into CDG.
 - Service Planning is not detailed enough and needs to be updated
 - Design Development phase should be approved by Program
- Training/ Education (12)
 - Training needed [6]
 - Seminars as method of training [3]
 - To present stakeholders with an overview of process and describe role of each stakeholders
 - For new people coming into the system
 - Training not needed [6]
 - Best way to learn is by working through projects
 - o Assistance
 - Refer to CMB PM [8]
 - Refer to DHS Program Project Manager [1]
 - Central system would be useful
 - o Presentation (10)
 - Small Scale Projects
 - Short version of the CDG could help [7]

- CDG need to be simplified for small scale projects
- Too many check points for small scale project
- o Need more of a streamline process
- o Overly time consuming for region
- To comprehensive for one time users
- One size fits all->not the care
- Short version will not help [3]
 - o Guidelines cover material well enough
 - Not worth effort
 - Information already in current guidelines
- o Other Comments
 - Details mainly relevant to CMB project managers
 - Restructure guidelines for different stakeholders
 - Program wants information regarding its responsibility
 - Agencies want information regarding their responsibility
 - CMB need to publicise the accessibility and existence of the guidelines
 - Ask people how things can be done better

DHS CMB Feedback 4 (interviews 16, 9, 21, 24)

Access (4)

- Web [4]
 - o Use Print as well [4]
- o Difficulty using the web [2]
- o Other comments
 - Two different versions of CDG, one on F: drive (old) and one on the web (new) [2]
 - Guideline need to be in one location [1]

Content

- Level of detail (3)
 - Not enough [0]
 - 0 Just right [1]
 - Too much [2]
 - Guidelines are big and bulky
 - o Other comments:
 - They are aimed towards large projects (\$20-50 million)
 - Inconsistencies exist in the guidelines
- o Gateway (3)
 - Have been involved in one [0]
 - A summary should be included [1]
 - There should be new guidelines specific to Gateway [1]
 - Links should be provided [1]
 - Should not be included [1]
 - Too temporary to include
- PV (3)
 - Have been involved in one [0]
 - A summary should be included [1]
 - Need to include a summary at early stages that defines the path of PV
 - Links should be provided [0]

- Should not be included [2]
 - Too temporary to include

o TCV (3)

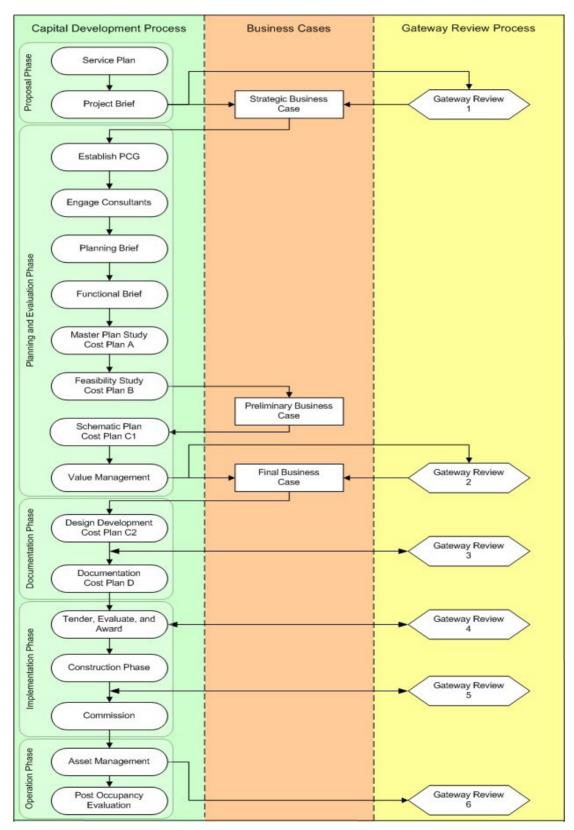
- Have been involved in one [0]
- A summary should be included [0]
- Links should be provided [1]
- Should not be included [2]
 - Too temporary to include
 - Not relevant to the guidelines

o Checklists (3)

- Uses them [2]
 - Uses them as a reminder
 - Helpful in making sure everything is done
- Does not use them [1]
- o Comments
 - Need to be readily accessible on the web
- POE (4)
 - Have been involved in at least one [1]
 - Should be done [4]
 - Not just one aspect, but expectations and other aspects, such as service delivery and physical structure as well
 - There needs to be a system for POE [4]
 - No central database to share the reports for future use
 - Major hurdle to perform POE would be funding and time
 - Should be done by 3rd Party [1]
- o Generic Briefs (1)
 - Should be referenced in the CDG [1]
 - Difficulty accessing on the web [1]
 - Many broken links on the website
 - Need to put all generic briefs on CMB website

- Reference Material (3)
 - Glossary would be useful [3]
 - Essential for new comer into the system
 - Acronyms would be useful [3]
 - Index would be useful [1]
 - o Comments:
 - FAQ would be useful
 - All the referencing material should be kept up-to-date
- o Outdated (3)
 - CDG need to be updated [3]
 - Need to be revised every 5 years to make sure all material is relevant
 - Would require extensive resources and commitment
 - It is a project itself to update the CDG
 - Need to have a method to update them
 - Particular Sections (3)
 - 3.2 Business Planning not done
 - 5.4 Commissioning of Facilities need more work
 - 5.5 Managing Contractor OH&S need more work
 - Cost Planing is terrible
 - Different opinions on Asset Management Plans
 - Not done before and no examples available
- Training/ Education (3)
 - Training needed [3]
 - Seminars as method of training [1]
 - Finding resources is a problem
 - Training for people who are joining the department for long term
 - A summary and a sheet of contact for help could help the new comers into the system
 - Training should be done at regional level
 - \circ Training not needed [0]
 - o Assistance

- Refer to CMB PM [1]
- Presentation (2)
 - Small Scale Projects
 - Short version of the CDG could help [2]
 - There should be a different version with an alternative procedure because there is low financial risk in small projects
 - DHS Regional Staff would benefit from smallscale guidelines
 - Short version will not help [0]
- o Other Comments (3)
 - DHS regional staff has high-turnover and are not familiar with CDG and CMB
 - CMB need to publicise the accessibility and existence of the guidelines
 - CDG need to be clear on which parts are mandatory and which are not
 - There needs to be better approach on putting the guidelines on the web, which can help get rid of repetition and surplus material
 - Guidelines across different states, in Australia, should have some uniformity
 - Workable templates that can be downloaded would be useful



Appendix F - Capital Development Process

Figure F.1: Capital Development Process

Appendix G - Survey Responses

The following section contains responses from survey respondents as directly written by the respondents. This section first provides the question the questionnaire asked surveyed stakeholders. Then, the responses appear sorted by agency, consultant, and DHS staff stakeholders. All of the following responses appear as direct quotes from the raw survey data.

Please list any difficulties you may have encountered when applying the

guidelines to low-cost projects:

Agency

- Time consuming. I have used this to prepare submissions for funding.
- o Overwhelming size & amount of detail
- Not specific to low cost products, although it prompts and reminders which is handy.

Consultant

- The guideline is generic and does not address the intent for smaller projects.
- Cumbersome to implement, and few if any on the team fully understand the requirements
- Suitability and adaptability eg POE for FR.US Projects level of reporting can be onerous eg. DD, SD reports
- Cost constraints which meant it was extremely difficult to meet mandated requirements

DHS staff

 Some requirements in schematic design and POE are suitable only for large projects, not small ones

Do you have any suggestions on improving the guidelines for low-cost projects?

Agency

- 0 Links to examples would be helpful
- Unifying the sections so that they don't overlap but could be used separately eg functional brief can stand-alone

Consultant

- The guidelines in the current form appear to address the requirements for all possible scenarios. A list that directs the user for requirements for low cost projects would assist the team greatly.
- o Superfluous, costly and time consuming requirements
- o A more precise and detailed document (for low cost projects)
- No do not believe that a \$7m project should be managed significantly differently than a \$67m project
- o Publish revisions & updates to consultants as when they occur
- As noted above, summary of the guidelines would be helpful for team members to access on projects
- o Combine SD and DD Phases
- 0 I think the guidelines should be the same for low-cost projects

DHS staff

- I feel that the some of the guidelines can be enhanced to refer to low cost projects specifically
- o Perhaps a section could be added to specifically address low-cost projects.

Please list any other comments or suggestions pertaining to receiving assistance

or information on the DHS capital project planning and delivery process:

Agency

o Need to link investment evaluation to operational budgets

• The Guidelines are vital in communicating government policy and procedures to agencies. Latest D.T.F. funding strategies need to be clearly stated.

Consultant

- The DHS could assign a dedicated person for assisting project team with queries on the guidelines.
- Having a coherence on projects regardless of whether public/private eg AIP for private hospitals is slightly different from SD/DD for public hospitals
- The use of the guidelines could be better policed, by CMB project mangers. i.e. I've worked on dozens of projects and I can't recall at a project kick-off meeting being asked whether all consultants had a copy of the guidelines and that the guidelines should be adhered to.

DHS staff

• Project Managers need to be trained to be trainees of CDG's.

In what ways do you feel the checklists can be improved?

Consultant

- The checklist should be used by the Department on every project as a controlling mechanism and should be included in the various reports.
- Incorporate a column detailing the party responsible for each item listed (i.e. primary responsibility) to ensure that all consultants understand their role and sign off that it has been adequately completed
- 0 A better description of what is required would be an improvement.
- o Reckon checklists could be replaced by tools which just help you do the job

Thinking about your experience with projects, what other topics do you feel the guidelines should include to better assist project planning and delivery of DHS capital projects?

Agency

- Need to provide information to expedite cross-sectoral links/ partnering on projects- given, whole of government, approach to community building. This is so particularly for community health in establishing new sites in developing area
- Guidelines on work space this copes with nursing ratios and other allied health staff, hmp space
- More Emphasis placed on assuring that infrastructure services were of sufficient capacity and quality to support the capital development.
- A description of Project Services that is the different stages of design eg. Pre design development, site analysis, schematic design, Design development. This assists non-professional project people in understanding the building design process.

Consultant

- Disability Discrimination Act/ Disabled Access/Environmental Sustainability / Sick buildings syndrome
- o (Should include) Operational requirements of each type of facility.
- o Performance based solutions
- A brief section on Government Budget processes would be useful to bring in particular agency/hospital PCG members up to speed on funding related issues
- Infection control (refer QLD Health) Energy + ESD Management Standardisation (a la HERO Study) Standardisation across all of Australia Mandating of applicability eg E6.4
- o Team building, principles and values, objective setting

In the section below, please provide any comments you have

concerning the level of detail within the specific areas of the guidelines?

Agency

- I would like access to examples of service/business plans in community health.
 When downloading the guidelines from DHS Website- there is a lot of wastage in paper- layout not concise
- o More Specific detail, similar to, hosplan, would be helpful
- There are a number of overlapping areas that are a problem when using the guidelines to develop a proposal. Otherwise the headings were very useful.

• There are far to many guidelines for a single person.

Consultant

- A single bed maternity room layouts would be useful Disabled access not provided to some bedroom layouts
- The Guidelines sometimes is generic for level of documentation required to meet the guidelines. Examples would be helpful.
- Many areas are vague, no one available that has a good grasp on the guidelines to give interpretations or definitive answers not specifically covered, ambiguous issues. Appears over the top in many areas. Regions and facilities do not appear to understand them too well, mainly due to staff changes.
- As guidelines they are quite adequate, but if intended as standards they would need modification. NPWC forms for Cost Plans should be updated
- o Considered to generally be effective and concise
- More emphasis needs to be placed in having the agency/hospital/user management understand project procedures/requirements
- o A standard template or more detailed P.O.E. format would be useful.
- There are other guidelines, which are not listed, and which are relevant. 'Draft' guidelines seem to stay as 'draft' for a long time.
- The guidelines are often too brief. More elaborate descriptions and examples where appropriate would be useful. In some instances the use of flowcharts may be more useful than text when describing procedures etc.
- Regarding cost plans and cost reports, the guidelines should have a mandatory format for reporting so that the reports provided by the QS's are similar in layout.
- Review of the overall process would be helpful- possibly simplifying. Needs review to integrate investment evaluation processes, gateway and other changes in Government practice. Would benefit by sections on principles/ values, and team building

DHS staff

o Depends on type of project being developed

Final Comments:

Agency

- The Guidelines are a handy step-by-step instruction on capital works development and should be maintained.
- Given the level of service that Barwon Health Receives directly from CMB and the appointed project managers and given their intricate knowledge of the guidelines, I rarely need to access them directly.
- Should provide an expected time to complete questionnaire. Only used guidelines in a limited capacity as Facilities Manager am more a member of the PCG Meetings rather than having authority in the areas of concern.
- Should provide an expected time to complete questionnaire. Only used guidelines in a limited capacity as Facilities Manager am more a member of the PCG Meetings rather than having authority in the areas of concern.

Consultant

- Draft guidelines for hospitals and Day Procedures purport to be interactive but they are not Suggest use of hyperlinks between sections of CD to facilitate quicker access Health Facility briefing and Planning lacks information on space projections for different size hospitals (other then level 4)
- A better definition of required deliverables should be included in the guidelines.
 Examples of deliverables (reports) should be included on the web info page.
- The two-column format of the pages is difficult to navigate on -line. A single column would be easier to scroll down.
- Knowledge management should be integrated into the guidelines- maybe with stories describing experience in projects and illustrating lessons learnt or things to be avoided.

DHS staff

o CMB staff are most helpful in clarifying any ambiguities in the guidelines

Appendix H - Interview Comments

Other Comments

For some of the comments, that were not directly related to our interview topics, we made the following list of the comments by stakeholder type:

Agency

- CMB needs to publicise the accessibility and existence of the guidelines by use of Internet and some sort of booklet
- Time-to-time survey the field on the guidelines
- o Publish project reports online
- o CMB needs to market itself at the agency level
- o CDG should define the roles of each member of steering committee

Consultants

- People are using the CDG outside of Victoria (in Perth)
- It is a guideline and should be viewed as such

СМВ

- o DHS regional staff has high-turnover and are not familiar with CDG and CMB
- CMB need to publicise the accessibility and existence of the guidelines
- CDG need to be clear on which parts are mandatory and which are not
- There needs to be a better approach on putting the guidelines on the web, which can help get rid of repetition and surplus material
- o Guidelines across different states, in Australia, should have some uniformity
- o Workable templates that can be downloaded would be useful

DHS Program

- CMB needs to publicise itself more
- o CMB needs to publicise the updates to the CDG

Appendix I - Post Occupancy Evaluation Suggestions

Cassie Izzard, DHS Program project manager provided following text to us in our interview with her:

Post Occupancy Evaluation

The following are my thoughts on the issues, which should be covered during any Post occupancy evaluation review. They are intended as a guide from my perspective and there are no doubt other issues which could be included. Some comments only apply to the refurbishment or extension of existing buildings.

I have grouped the issues into several categories, which relate to the stages of development, as I know them.

Brief

- Did the briefing process capture all the hospitals requirements?
- Have the patient numbers been consistent with expectations?
- Are the facilities adequate to cope with the patient numbers/service demand?
- If there are any inadequacies what are they and what changes would be required to satisfy current requirements?
- Have anticipated reductions in staffing levels/operational cost savings been achieved?
- Have all the briefed facilities been provided?
- Was the budget adequate to provide the facility as briefed?

Planning

- Have the desired functional relationships between buildings and areas within buildings been achieved?
- Are the room sizes adequate for their function?
- Do the functional relationships allow for efficient service delivery?
- Do the buildings receive adequate natural light and outlook?
- Is any natural ventilation adequate?

- Does the planning ensure security of patients and staff and can the building(s) be managed efficiently after hours?
- Is the car parking adequate and within easy access to the building?
- Can patients be dropped off easily and is there adequate short term parking for drop off and couriers/deliveries?
- Is ambulance access adequate and is there adequate waiting area for ambulance discharge of patients?
- Are the waiting areas within the building adequate for patients and for relatives and friends waiting for patients?
- Are storage areas adequate and well located?
- Have adequate public spaces such as toilets, cafeterias and coffee shops been provided?
- Does the landscape design allow secure patient access to outdoor areas and are there outdoor areas available for visitors?
- Are the circulation routes within the building clear and easily followed by visitors and staff?
- Are the public facilities easy to locate and access?
- Do the public and the users like the building design and is it appropriate for its location?
- Is the building easy to access and use by disabled persons?
- Are the site services adequate to cope with the actual loads?
- Have there been any planning changes implemented and if so why were they necessary?

Detailing

- Does each room type have adequate facilities such as fixed furniture and equipment and does the loose furniture fit without the room becoming crowded?
- Are the room layouts functional
- Has adequate space and services been provided for Group 3 items?
- Are the materials used for;
 - o Floors
 - 0 Walls
 - o Ceilings

o Joinery

adequate and serviceable?

- Are the materials easy to clean and maintain?
- Have operational efficiencies been achieved in operating and maintaining the building?
- Are the services outlets provided adequate and are they functionally located?
- Have the junctions of different materials been detailed to avoid bumps or cracks?
- Have there been any alterations to room layouts or equipment and if so why were they necessary? Did the changes solve the problem?
- Did the FF&E fit and was its location functional?

Construction

- Was construction achieved with out compromising hospital operation?
- Were any staging issues anticipated and planned for?
- Was the standard of construction achieved acceptable?
- Were any defects rectified promptly?
- Were there any major defects?
- Are there any warranty issues?
- Did any defects or its rectification, impact on hospital operation?
- Was dust/noise/waterproofing an issue during construction?
- Did construction have any impact on the maintenance of existing plant or equipment?
- Did the hospital experience any loss of services such as power or water during construction?
- Did the builder achieve the program?
- Were delays to the program communicated to the hospital in adequate time to allow you to make alternative arrangements?

Commissioning

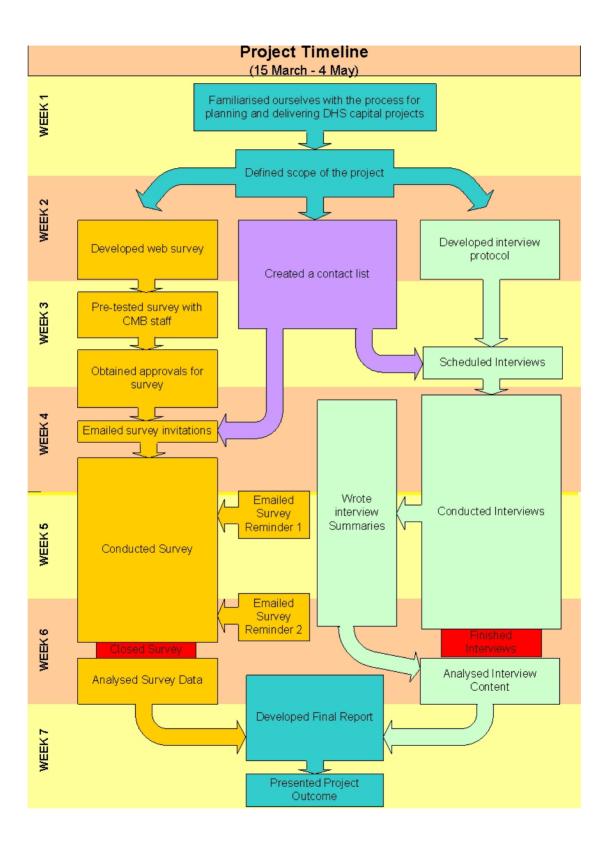
- Was the hospital adequately involved in the commissioning process?
- How was the handover of the building handled?

- Were Operating and maintenance manuals provided at handover and were they adequate to operate and maintain the building?
- Was the budget for FF&E adequate?
- Are the services easy to maintain?
- Were staff able to understand the functional logic of the building and is it being used as designed?
- Were there any problems experienced during commissioning?

6 Consultant Performance

- Did the consultants provide the staff and the service nominated in their proposal?
- Were the personal involved experienced in this type of work?
- Were the consultants client focused?
- Were the time frames which had been agreed, met by the consultants?
- Did the consultants dedicate adequate time to the initial briefing and to the user groups to ensure your requirements were clearly defined.
- Were the consultants responsive to requests for change or redesign to meet your requirements?
- Were the consultants able to design to the budget?
- Was the tender process handled professionally?
- Did the consultants spend sufficient time on the project during the construction and defect liability phases of the project?
- Did the consultants respond promptly to issues raised during the construction and defect liability periods?
- Would you recommend the consultants for a similar project?

Appendix J - The Project Timeline



Appendix K - CDG Section 1.1

Section 1.1 Policies and Procedures of the Capital Development Guidelines starts on the next page.



Capital Management Branch May 2001

Capital Development Guidelines

1.1 Policies and Procedures

Acknowledgements

The contribution of Capital Management Branch staff, in the development of this Guideline is gratefully acknowledged. For further information: Ben Gelnay, Manager Standards Capital Management Branch Ph: (03) 9616 7028 Fax: (03) 9616 7028 Fax: (03) 9616 8379 Email: ben.gelnay@dhs.vic.gov.au Published by Victorian Government Department of Human Services. ISBN ______

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Foreword

The Capital Development Guidelines are a practical guide intended to provide Regional Directors, Program Managers, Network Boards and Agency Managers with assistance in planning, organising and implementing capital investment projects.

These guidelines apply to all projects regardless of size, cost, complexity and source of funds.

Full implementation of the guidelines will ensure projects:

- Comply with Government policy.
- Enhance service delivery in accordance with current policy.
- Add value to projects.
- Ensure projects are completed within time, cost and quality objectives.
- Allow managers to understand and carry out their responsibilities.
- Minimise the stress and conflict associated with the procurement of major capital investments.

The Capital Development Guidelines are produced as a series by Capital Management Branch. They cover each phase in the capital investment process, from the initial project proposal through to operation and postoccupancy review. Each guideline outlines project activities and roles and responsibilities of various parties. The relevant guideline should be referred to as each phase of development occurs. A simple checklist is supplied with each guideline as a useful tool to help ensure the development achieves its objectives. The Capital Development Guidelines can be found on the Department of Human Services' Intranet at the following address: http://intranet_1/capital/web.htm

Introduction

Capital Management Branch has developed this Guideline as an overview of the capital investment process to assist managers involved in capital projects. It outlines the policy context for undertaking capital investment projects, the capital investment process, organisation and management of a capital project, and the associated risks.

The procedures contained in the Guideline are applicable to every Agency, Network and Region, and apply to all projects regardless of cost. The guidelines apply to all projects using government funding from any source. Procedures for projects with a Total End Cost (TEC) greater than \$5 million are also subject to more rigorous assessments such as formal value management and detailed investment evaluation studies.

Planning a Capital Project

Project planning is part of the asset management cycle as set out in Figure 1. The cycle progresses through acquisition, operation and disposal or refurbishment. Successful implementation of a project is dependant on good planning.

Key points that must be considered when planning, designing and constructing facilities include:

- Building projects have long lead times. Even simple projects typically require three years from initial planning to completion.
- Over a ten-year life of a new facility, approximately 85 per cent of the cost will be involved in service delivery costs and 15 per cent in the capital investment.

Figure 1: Capital Development Process

- Decisions made during initial planning stages are the most critical. Approximately 80 per cent of the cost-related decisions are made within the first 2 per cent of expenditure for a major project.
- It is easier and more cost-effective to implement changes in the early stages of a project. Implementing changes when design is advanced or construction has commenced is expensive and leads to delays.
- Effective project management involves a systematic approach that:
 - Defines realistic objectives for service delivery, time and cost.
 - Makes best use of expertise and experience in multi-disciplinary teams.
 - Manages and monitors the process to achieve objectives.

Capital Management Branch

Capital Management Branch is responsible for the management of capital investment projects on behalf of the Department of Human Services.

Capital Management Branch's role and responsibilities are summarised as follows:

- Establish, implement and audit compliance with policy, procedures and guidelines for capital investment by the Department of Human Services and agencies.
- Provide information and advice to the Ministers for Human Services portfolios and Department of Treasury and Finance in relation to the Department of Human Services' capital investment program.

- Provide advice on the planning, design and implementation of capital investment projects to Programs, Regions and Agencies.
- Work with Programs, Regions and Agencies to define service requirements and policies in relation to building and asset management requirements.
- Plan, organise, monitor and control the Department of Human Services' capital investment program to meet the Department's service objectives, obtain best value for funding, and deliver projects within quality, time and cost objectives.
- Assessment and management of risk exposure areas of capital investment projects.
- Engage and manage consultants and building contractors on behalf of the Department.
- Act on behalf of the Crown in the role of principal representative or superintendent on Departmental projects.
- Assist in managing infrastructure investment projects.
- Recommend policies and priorities for capital projects for allocation of funding.
- Administer approvals for projects to proceed through the phases of project development.
- Represent the Department's interests in statutory, regulatory and policy development in the building and construction sector.

The formulation of any new capital investment program is based on:

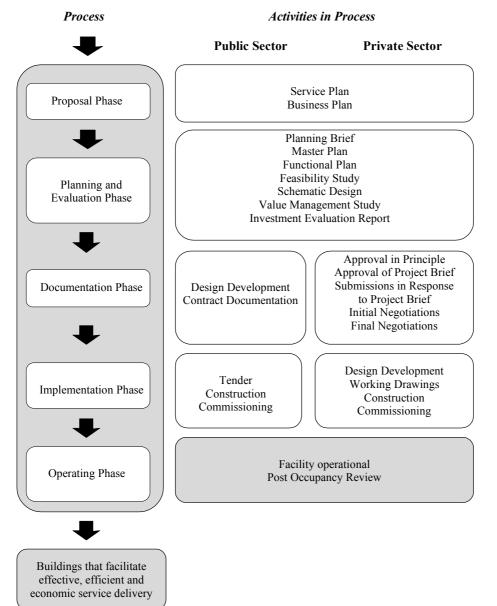
- Ranking of projects according to government policy.
- A clearly demonstrated service delivery need.
- Clearly identified outcomes to be achieved by implementation of the project.
- Financial viability of the project; and
- Compliance with asset management principles.

A range of Generic Briefs are available through Capital Management Branch for direct application to capital projects. Generic briefs provide design guidelines that comply with Departmental policy and procedures for standard Human Services facilities. A specific project brief is normally prepared to meet particular service provision needs.

1 Capital Investment Process

The capital investment process outlines a sequence of phases that a capital project must follow to achieve a desired service delivery objective. These phases are shown in Figure 2 and outlined in the following section.

Figure 2: The Capital Investment Process



1.1 Proposal Phase

The first phase in the capital investment process is the proposal phase. It commences when a Program, Region or Agency identifies a service need and prepares a proposal that includes a capital investment component. The proposal is to be based on relevant policy, service needs and consideration of identified assets and physical requirements.

The proposal phase is complete when the service and business plans have been approved by the Program.

- Service plan Defines the services to be delivered to the community and the ancillary or support services also required.
- **Business plan**—Identifies the optimal approach for delivering the defined services. Involves the consideration of options including the use of existing physical assets or a requirement for new or refurbished assets.

The following *Capital Development Guidelines* have been prepared to assist Agencies to complete the proposal phase:

3.1 Service Planning.

3.2 Business Planning.

It may be necessary to establish a management team (Project Control Group) and engage consultants at this early stage. Additional guidelines to assist in these activities are:

2.1 Project Control Groups.

- 2.2 Consultant Engagement.
- 2.3 Cost Plans and Reports.
- 2.4 Monthly Reports.

Proposals approved by the Agency are submitted to the Region and Program for consideration and approval, (with or without amendment). The bid for funding to initiate a project is then ranked within the Department of Human Services' overall asset investment program and submitted for Ministerial approval.

The proposed project is included on the Design List if Ministerial approval is received.

1.2 Planning and Evaluation Phase

The objective in including a project on the Design List is to bring it to a stage at which it is fully planned. Inclusion of a proposal on the Design List does not commit the Victorian government to funding a capital project.

During the planning and evaluation phase, feasibility and initial design work is undertaken to establish the scope and limit of cost of the project.

The main steps in the planning and evaluation phase are:

- **Planning Brief** Establishes a framework in which a Master Plan Study can be conducted. It provides consultants with information about:
 - Service delivery philosophy of the Agency and a statement of its role within the National, State, regional and local context.
 - Broad description of management and operational policies including organisational structure.
 - Description of the range, types and level of services to be provided, the

requirements of individual departments and the relationships between the various services and departments within the Agency.

- Staffing profile (including number and type of staff and the hours they will work).
- General planning considerations.
- Master Plan A thorough investigation of a feasible range of facility planning options, resulting in confirmation of the site location and a recommended plan for the future development of the Agency.
- Functional Brief A description of the functions to be accommodated and the relationships between functions for a proposed capital project. It should identify how the project meets the objectives and policies of the organisation.
- **Feasibility Study** Evaluates options against a set of agreed criteria and presents:
 - A detailed analysis of a preferred facility development strategy; and
 - A realistic estimate of the total project end cost (Cost Plan B)
- Investment Evaluation A comprehensive analysis of the relative merits (financial and socio-economic) of identified options to determine the preferred option. The Investment Evaluation Report forms the basis for government approval of the project and the allocation of capital and recurrent funding to construct and operate the facility.
- Schematic Design Preparation of design briefs and layout, including key physical elements, areas, locations, and volumes

including basic building services systems and Cost Estimate (Cost Plan C1)

• Value Management – Formal review and evaluation of a proposed project to achieve the best value for money.

Capital Management Branch has produced the following guidelines to assist with processes undertaken during the Planning and Evaluation phase:

- 3.3 Planning Briefs.
- 3.4 Master Plan Studies.
- 3.5 Functional Briefs.
- 3.6 Feasibility Studies.
- 3.7 Schematic Design.
- 3.8 Investment Evaluation Reports.
- 3.9 Value Management Studies.

The Investment Evaluation Report for all projects must be signed off by the Agency, Region, Program Director and Capital Management Branch. Proposed projects are again ranked within the overall Department of Human Services asset investment proposal and submitted to the Expenditure Review Committee (ERC).

If ERC approval of the Schematic Design and Cost Plan C (defining the project scope and TEC) is obtained, the project is included on the New Works List and can proceed to documentation and tender. The ERC also independently considers any project over \$5 million.

Completion of the Planning and Evaluation phase may result in approval to either proceed with the project using government funding, terminating the current proposal, or to seek private sector funding. The project funding may involve a number of funding sources that must be identified at this stage. For selected projects to be carried out by Agencies, a Capital Investment Funding Agreement is to be signed. The Agreement defines the scope, cost, timeframe and funding arrangements for the project and commits the responsible Agency to delivering the project within these parameters. The funding agreement is usually signed at the end of schematic design.

Documentation Phase

All projects are required to undergo the following steps during the documentation phase:

- Design Development:
 - Completion of design in detail including architectural and engineering and the incorporation of all Authority requirements.
 - Confirmation of the cost estimate (Cost Plan C2) to demonstrate the project is within budget.
 - Obtaining sign off from users.
- Contract Documentation:
 - Contracts used in the undertaking of works are to be approved Departmental forms of contracts and relevant information is available from the CMB representative on the PCG.
 - Documentation of works to be undertaken to tender, including:

- Conditions of tendering
- Contracts
- Working drawings
- Specifications
- Pre-tender estimate (Cost Plan D)
- Bill of Quantities (where appropriate).

Approval must be obtained from CMB before a Call for Tenders can be advertised.

The contract documentation is issued to tenderers to price the project and is used as a basis for entering into a contract with the builder in lump sum contracts.

The guidelines relevant to the documentation phase are:

- 4.1 Design Development.
- 4.2 Contract Documentation.

The documentation phase is complete when contract documentation and Cost Plan D are approved for use by the Principal's representative and Superintendent to the contract (for Human Services projects). The contract and project management responsibilities rest with Capital Management Branch.

1.3 Implementation Phase

The Implementation Phase includes tendering, construction and commissioning of the facility. Projects cannot be tendered until funding is approved by the ERC and authorisation received from CMB.

Tendering must be conducted in accordance with the:

- Code of Practice for the Building and Construction Industry (1999).
- Ministerial Direction No 1: Tendering Provisions for Public Construction.
- Ministerial Direction No 3: Probity and Disclosure Provisions for Public Construction.

Tendering for major projects usually involves:

- Seeking registrations of interest.
- Shortlisting capable contractors.
- Calling and evaluating detailed tenders.
- Awarding of the contract.
- Execution of the contract.

For other projects, the tender process may only require the calling and evaluation of tenders or the use of a list of pre-qualified, approved tenderers.

After the evaluation of tenders, a Letter of Acceptance is issued to the successful contractor and a construction contract process commences:

- Construction Awarding of the contract requires the commencement of development including:
 - Appointment of Superintendent to administer the contract.
 - Undertaking of works including completion of all prerequisites called for in the contract (insurance, permits, program, guarantees etc).

- Provision of access to the site (or possession) and making payments as set out in the contract by the principal.
- Contract Administration Normally undertaken by the Principal Consultant on appointment by the Principal. It aims to ensure:
 - The terms of the contract are honoured by all parties.
 - The project conforms to documentation.
 - The completed facility is fit for its intended purpose.
- Commissioning Occurs at the completion of the Implementation Phase and involves Building Commissioning and Operational Commissioning. It marks the commencement of service delivery from a new facility, ensures that all building systems operate effectively and efficiently and that staff are familiar with operating the facility before client services commence. With complex new facilities commissioning can be a major activity in itself. Building commissioning is completed when the Building Surveyor issues a Certificate of Occupancy which sets out requirements in relation to essential services.

Capital Management Branch has produced the following guidelines to explain the requirements of contract administration and commissioning:

- 5.1 *Tendering, Evaluation and Acceptance.*
- 5.2 Construction Insurance.
- 5.3 Contract Administration.
- 5.4 Commissioning of Facilities.

The implementation phase is complete when the Agency is able to safely occupy and deliver services efficiently from the facility.

1.4 Operating Phase

The operating phase starts with occupation of the building by the users. A Defects Liability period applies to the completed facility for a period generally of 12 months. During this period the builder is responsible for rectification of any defects identified.

A Post-Occupancy Evaluation (POE) is usually undertaken 12 months after occupancy. POE is the structured, systematic analysis of an asset's actual performance measured against the objectives stated in the design brief and projections in the Investment Evaluation Report. The information collected through a POE is fed back into the process of asset acquisition, operation and maintenance to **Table 1: Summary of Approvals** ensure continuous improvement in the planning and implementation of projects.

Approvals

The approvals and sign-offs required for a project throughout the capital investment process are summarised in Table 1.

Approval is required for projects to advance to the following stages:

- Feasibility Status to undertake either an initial Masterplan or Feasibility Study).
- Design List to advance to subsequent design phases.
- Asset Investment Proposals for project to be considered for inclusion in the DHS list to be submitted to Minister/s for approval.
- New Works to enter into a construction contract.

	Agency	Program	Region	СМВ
Service Plan	*	\checkmark	*	*
Business Plan	*	\checkmark	*	*
Planning Brief	*	*	*	*
Master Plan	*	*	*	\checkmark
Functional Brief	*	*	*	*
Feasibility Study	*	*	*	\checkmark
Value Management	*	*	*	*
Investment Evaluation	*	\checkmark	*	√ 3
Design List ¹		\checkmark	*	√ 3
Schematic Design	*	*	*	\checkmark
New Works List ¹		*	*	*
Design Development	*		*	*√
Contract Documentation	*		*	*√
Tender ³	\checkmark		*	*√ 2

NOTES: ✓ Denotes approval.

* Denotes endorsement

Final approval by Minister.

² For Department projects (for example, Forensic, Juvenile Justice) CMB will provide approval on behalf of the Principal (Human Services Secretary/Minister).

³ For Agency projects, CMB will audit the tender process and ensure assessment of financial viability of tenderers is undertaken. CMB has an 'action' role associated with the sign off required for activities from planning brief to tender.

Programming of the Project

Projects with a TEC in the \$2m to \$5m range typically take two to three years from the commencement of service planning to the completion of the building. Large and complex projects and major refurbishments of existing operating facilities may require three to four years for completion.

Additional time may be required for site acquisition, statutory approvals or delays in design and construction. Adverse weather conditions can add six months to the total

project time while obtaining planning approvals can impose delays of many months. Missing the budget cycle can lead to a delay of a year in project procurement.

Detailed timeframes should be prepared by experienced project managers. The program should allow realistic times for activities in each phase to be undertaken. As a general rule, an allowance of 20 per cent should be made for time delays. Progress of the project should be compared to the planned program on a monthly basis and reported regularly to the Project Control Group.

Activity	Months	Year 1	Year 2	Year 3
Proposal	4 to 6			
Approval (Design List)	0 to 2			
Planning and Evaluation	6			

Figure 3: Program for Human Services Funded Projects: \$2m to \$5m Range

Proposal	4 to 6		
Approval (Design List)	0 to 2		
Planning and Evaluation	6		
Documentation Phase	6	 	
Approval (New Works)	4 to 5		
Implementation Phase		 	
 Tender/Award 	4		
Construction	9 to 15	 	
Commission	0 to 2	 	

Figure 4: Prog	am for Private Sec	tor Funded Projects	: \$10m+ Range
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Activity	Months	Year 1	Year 2	Year 3	Year 4
Proposal	4 to 6				
Departmental Approval	0 to 2				
Investment Evaluation	6				
Approval In-Principle	2				
Proiect Brief	8				
Tender and Award	4				
Design Documentation	4				
Construction	9 to 15				
Commissioning	0 to 2				

Year 4

Figure 3 shows the typical program for a government-funded project within a \$2m to \$5m range. Within the 40 months allowed for project procurement approximately 15 months is allowed for construction. The overall program may be reduced for smaller projects.

Figure 4 shows the typical program for a private sector funded project. The initial timeframe is the same as for Government funded projects up to the completion of the Development Proposal. Approval in Principle to approach the private sector is anticipated to take two months.

Lead times for projects are long and must be scheduled according to the annual Department of Treasury and Finance budgeting cycle (Refer Figure 5).

Agencies must submit asset investment proposals by the end of June for them to be included in the compilation of the Regional priorities in July/August and the development of the Department's annual Feasibility and Design List by the end of November. Agencies will normally be advised of approved projects in early January. New works are identified in the budget papers in May of each year.

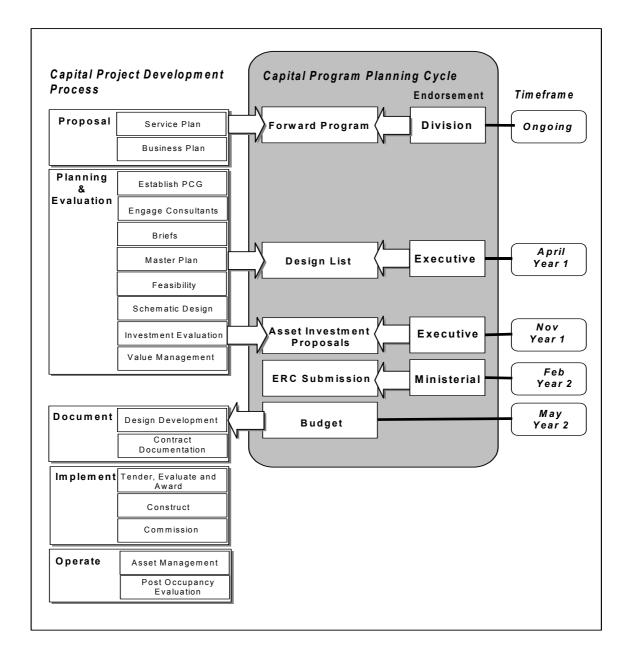


Figure 5: Typical Timeline for Government Funded Capital Investment Project

2 Organisation

A project management approach is essential for the successful translation of service objectives into effective operating facilities. The following section outlines the roles and responsibilities of the project control groups, consultants, and user groups, and the process of risk management. The relationships between key stakeholders are illustrated in Figure 6.

2.1 Roles and Responsibilities

Key stakeholders in the capital investment process include the Program, Region Agency and Capital Management Branch. The responsibility for each of these groups is as follows:

- Programs:
 - Development of policies and corporate planning for the delivery of services.
 - Provision of a strategic approach to capital investments across the State, eg ranking of recurrent and capital priorities within the program.
- Regions:
 - Delivery of service programs within their geographic areas.
 - Provision of information about the particular needs of the area and sensitivity to local issues.
 - Implementation of program priority projects, asset management and sign off on surplus assets.
- Agency:
 - Day-to-day carriage of the project.
 - CEO to be involved and responsibility for the project to be allocated to a specific person.

- When acting as the principal to a contract the Agency has legal and financial responsibilities including the making of payments.
- Ensuring the project complies with recurrent funding objectives for operation and maintenance.
- Ensuring consultation with key sectors eg monitoring and control of input from user groups, consultation with facility managers as well as operational and line managers,
- Capital Management Branch:
 - Provision of technical advice based on expertise in the planning, design and construction of buildings.
 - Focus on the processes, organisation and risk management processes needed to manage a capital works project.
 - Ensuring the Department achieves value for money.
 - Responsible for approvals (for example, feasibility, design and new works) and liaison with other Government Departments, for example, Treasury and Finance.

Project Control Group

A Project Control Group (PCG) is formed when Ministerial approval is given for the project to be included on the Design List and for it to be progressed to Master Plan and Feasibility Study.

The PCG is comprised of representatives of the Agency, Program, Region (as required)

and Capital Management Branch. Its role is to:

- Monitor progress of a capital project.
- Ensure the project remains within the approved scope, budget and time parameters.
- Ensure the project is fit for purpose.

The PCG should meet monthly and focus on strategic decisions. It has delegated authority to make recommendations and is required to:

- Give direction to Principal Consultant.
- Obtain required approvals.
- Establish and implement authorisation of payments.
- Decide between competing requirements and priorities.

2.2 Consultants

Consultants are responsible to the Project Control Group to provide specialist expertise and advice in management, planning, design and construction.

In most projects the Principal Consultant will be the architect. The Principal Consultant is responsible for leadership of the consultant team. For large or complex projects, a Project Manager or Director will be responsible for leadership of the consortia of consultants and sub-consultants.

2.3 Contractors

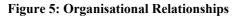
Contractors are responsible to the principal and are required to carry out works in accordance with the contract.

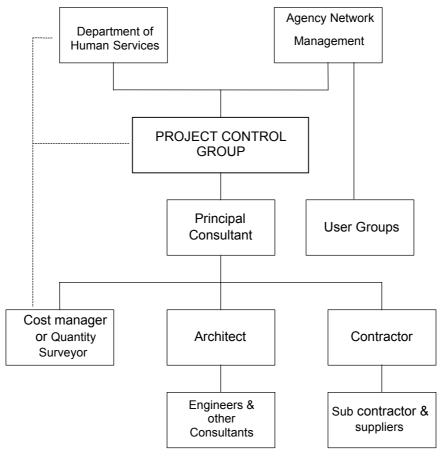
Activity	Project Manager	Architect and Engineers	Quantity Surveyor	Value Management Consultant	Other Specialists*
Planning brief & Master plan	Optional	\checkmark	\checkmark	\checkmark	Optional
Functional Brief and Feasibility Study	Optional	\checkmark	\checkmark	Optional	Optional
Schematic Design	\checkmark	\checkmark	\checkmark	\checkmark	Optional
Design Development	\checkmark	\checkmark	\checkmark	Optional	Optional
Contract Documentation	\checkmark	\checkmark	\checkmark	Optional	
Tender	\checkmark	\checkmark	\checkmark		Optional
Construction/Contract Administration	✓	\checkmark	✓		Optional
Post Occupancy Evaluation	\checkmark	\checkmark	\checkmark		Optional
* Other specialists may be required depending on the type of project, for example:					

Table 2: Consultants Generally Required for Project Costing More than \$5 Million

- Building SurveyorEnergy Engineer
- Kitchen Consultant
- Industrial Hygienist
- Town Planner

- Construction Manager
- Geo-Technical EngineerProbity Auditor
- Acoustic Engineer





User Groups

User groups represent staff who will be responsible for operation of the facility and provide specialist expertise and advice to the PCG on specific facility requirements. User groups should include those responsible for operation and maintenance of building systems and services, building fabric, fitouts, cleaning and environmental services. User group involvement should be sought at functional briefing stage and building services design and material selection stages, eg. schematic design, design development and documentation stages. The PCG may or may not accept advice provided by User Groups. The role of a User Group is to:

- Assist in identifying capital issues that have recurrent/operational benefits and trade-offs.
- Provide facility management input into the design and documentation process.

User groups should be encouraged to think about better ways of delivering the services proposed. The input from the User Group provides an opportunity for re-engineering the process of service delivery.

3 Risk Management

Risk management is an important element of project management. It involves the systematic application of policies, procedures and practices to identify, quantify and manage risk where necessary, allocate risks, provide contingencies, and monitor and manage to take account of risk. A suitable reference document for risk management is Australian Standard AS4360

Risks to capital projects include time and cost overruns, high service delivery costs, disruption to service delivery during redevelopment of existing facilities and insolvency of builders or sub-contractors.

The following section outlines some of the systems used by PCGs to manage risk in capital project developments.

3.1 Contingency Planning

Departmental facilities and funded projects require secure supply of engineering services to meet the Department's commitments for the provision of health and community services. The required level of security of services is governed by a number of factors, including the nature and volume of the services being provided, the members of the community requiring the services and the availability of alternative services.

Selected facilities must have the capability of delivering **on a continuous basis** all critical infrastructures such as water and electricity required to maintain service delivery.

Asset assessment needs to be undertaken prior to project definition to clearly identify the capacity and integrity of the existing infrastructure to meet project requirements. The assessment should include contingencies for future demands, reliability and availability issues.

3.2 Health & Safety

Departmental facilities and funded projects are required to comply with regulatory requirements such as Fire Risk Safety, WorkCover, Occupational Health & Safety, Hazardous Materials, Legionella, Contractor & consultant selection, on site construction procedures, asset maintenance and associated concerns. Appropriately qualified professionals should be engaged to ensure that regulatory requirements are addressed and Duty of Care responsibilities are discharged in a satisfactory manner.

3.3 Timeframe Control

Timeframe control requires the development of a predicted program that combines the project timelines and milestones or targets for major activities such as design, tendering and handover of the project for occupation. The program must include appropriate allowance for delays. Actual project progress is monitored and measured against the program and corrective action taken as required. This may include adding resources or changing logic.

3.4 Cost Management

Cost management includes establishing and reviewing budgets and managing commitments and expenditure. Cost estimates must include adequate contingency sums to take account of risks, such as unforeseen items during construction. The PCG reviews predictions and actual activities to determine appropriate actions and/or interventions.

The *Capital Development Guideline* relevant to this phase is:

2.3 Cost Plans and Reports

3.5 Value Management

Value management is a systematic review of the essential functions or performance of a capital project to ensure that best value for money is achieved. It takes an overall view of the function of the facility as well as capital and recurrent costs.

Cost is understood as the total expenditure for the planning, design, construction, commissioning and service delivery of the facility over the life of the facility while the value of a facility is an estimate of its usefulness to the users in delivering services.

The value management process should be facilitated by a party independent of the consultant/contractor team.

The *Capital Development Guideline* relevant to this phase is:

3.9 Value Management

4 Policy

The following section outlines the policy context for delivering capital investment projects.

4.1 Victorian Government

Requirements

4.1.1 Regulatory Requirements

Key statutory requirements affecting capital investments are:

- Project Development and Construction Management Act, 1994.
 - Ministerial Guideline #1.
 - Ministerial Guideline #2.
 - Ministerial Guideline # 3
- Building Act, 1993.
 - Maintenance of Essential Services
- Financial Management Act, 1994.
- Planning and Environment Act, 1987.
- Town planning controls and processes.

The relevant State Government Acts can be viewed via the Internet at: *http://www.dms.dpc.vic.gov.au/*

4.1.2 Policy and Guidelines

4.1.2.1 Probity and Disclosure

The Victorian Government's provisions for probity and disclosure in relation to public construction are contained in Ministerial Direction #3 and the accompanying guideline.

The policy and guideline documents can be reviewed at the Victorian Government Purchasing Board site at:

http://www.vgpb.vic.gov.au/

4.1.2.2 Asset Management Policy, 2000

<u>The Government's policy statement *Sustaining*</u> <u>*Our Assets*</u> is concerned with maintaining a flexible portfolio of assets to enable services to be delivered effectively to the community and to provide a foundation for economic growth.

The policy provides the foundation of all asset management related activities, such as planning, evaluation, acquisition, operation and ultimate retirement of an asset and identifies the principles for effective asset management as:

- Service delivery needs form the basis of all asset management practices and decisions.
- An integrated approach to planning.
- Informed decision-making.
- Asset management within a whole of government policy framework.
- Accountability and responsibility.
- Sustainability.

The document *Sustaining Our Assets* can be viewed or downloaded from the Department of Treasury and Finance website at: *http://www.vic.gov.au/treasury/treasury.html*

4.1.2.3 Asset Management Series, November

1995

The Asset Management Series sets out the principles, operational policies and practice for asset management by all Victorian Government departments and agencies. It also catalogues references to assist with asset management processes. The Guideline Series can also be viewed on the Department of Treasury and Finance website listed above.

Capital Management Branch has produced the following guideline to assist with asset management:

Asset Management: Building Standards and Condition Assessments Guideline.

4.1.2.4 Investment Evaluation - Policy and

Guidelines

The Government has a clear methodology to support decision making for capital investments. The *Investment Evaluation Policy and Guidelines* is the 'principal linking mechanism between the Government's planning and infrastructure strategies and the capital works approval and budget process'. The guidelines set out how investments are evaluated and provides a tool for managers to use in deciding investment priorities. The policy applies to all departments, irrespective of the source or level of funding. The Investment Evaluation process requires the option of private sector involvement in the project to be considered.

Departments are required to rank all asset investment proposals based on the outcome of investment evaluations. This ranking is to be forwarded to Department of Treasury and Finance for a whole of Government ranking. Projects are then recommended to Government via the Economic Review Committee.

Projects that receive funding approval are announced in the Government's Autumn Economic Statement and by Ministers. The Capital Development Guideline relevant to this phase is:

3.8 Investment Evaluation Reports.

4.1.2.5 Partnerships Victoria

The government's *Partnerships Victoria* policy seeks to create partnerships between the Government and private businesses that use the capabilities and skills of both to achieve improved value for money and deliver performance improvements and efficiency savings. The aim of the policy is to use innovative approaches to the provision of infrastructure and ancillary services to deliver significantly improved services to the community and maximise the social and economic returns from Government expenditure.

The policy applies to public infrastructure projects where the present value of payments to be made by the Government (and/or by consumers of a service) will exceed \$10 million during the period of a partnership.

There is no single preferred form for projects entered into under the *Partnerships Victoria* policy. Projects should focus on the specification of the end result rather than the means of delivery.

The *Partnerships Victoria* policy sets the conditions for projects to be considered for *Partnerships Victoria* procurement. Copies of the policy document can be downloaded from the Department of Treasury and Finance website.

4.1.2.6 Integrated Management Cycle

The Integrated Management Cycle is a calendar of events and processes that constitute the Victorian Government's annual planning, budgeting, reporting and review activities. The aim is to synchronise planning, monitoring and reporting within Government.

The key date for capital investment projects is October/November each year. Schematic Design and Cost Plan C for a project must be complete by this date to allow Departmental and Treasury processes to commence in October of any year. This allows projects to be assessed and new capital investments to be announced in the Autumn Statement in April of the following year.

The timeframe for planning, design, approval and construction is set out in Figure 5.

4.1.2.7 Code of Practice for the Building and

Construction Industry, July 1994

The *Code of Practice for the Building and Construction Industry* sets out the Government's expectations for the building and construction industry.

The Code requires all parties to:

- Initiate and manage projects effectively.
- Satisfy legal requirements for probity and to avoid conflicts of interest.
- Employ consultants in a fair and equitable manner.
- Tender projects fairly.
- Administer contracts effectively.

The Code may me viewed on the building publication section of the Department of Infrastructure website:

http://www.doi.vic.gov.au

Department of Human Services' Policy

The capital investment program is critical to Department of Human Services' role in the provision of services for all Program areas. Information regarding the Department's programs is available from the Human Services website at:

http://www.dhs.voc.gov.au

Projects selected for capital investment reflect the Department's program strategies and are part of the commitment to achieving improvements in service delivery. The following section outlines current policies related to capital investment projects.

Acute Health

Acute Health Division of the Department of Human Services is responsible for ensuring hospital buildings and equipment meet the community's expectations, enable safe and effective health care to be delivered, ensure efficiency is achieved and are able to deliver emerging models of care. In particular, the Infrastructure Unit is responsible for ensuring the scope and budget of projects will deliver government objectives for efficient service delivery, within a statewide service system.

The focus of capital investment in Acute Health is the upgrading of clinical services and supporting infrastructure, including major medical equipment and information technology.

Current government policy is to maintain and enhance rural self-sufficiency and to integrate rural health services as far as practicable. Accordingly, capital investment in rural areas has focused on enhancing the network of base hospitals providing tertiary acute health care services within each Human Services region. This has been supported by redevelopment and/or refurbishment of sub-regional acute hospitals that provide primary and secondary acute health services and increased focus on integrating acute and non-acute services.

Rural hospital capital projects are prioritised according to the improved level of patient access and quality of service and rationalisation and efficiency gains

4.1.3 Aged, Community & Mental Health

4.1.3.1 Aged Care

The focus of the Government's aged care agenda is on:

- Funding of more appropriate, good quality, community and home based services that foster recovery, improvement and maintenance of individual health status for older Victorians and enable them to remain living independently in their own homes.
- Upgrading State government nursing homes to Commonwealth standards.

The 2001-2001 *Departmental Plan* (Draft) includes the following directions for Aged Care:

- Enable a greater proportion of older people to remain living independently in their own homes.
- Enable people who live in state owned residential aged care services to receive appropriate and high quality standards of care.
- Provide services that recognise and reflect the diversity of older people.

4.1.3.2 Community Health

The Community Health unit of Aged, Community and Mental Health Branch incorporates the following services: Community Health Services, Family Planning, Family and Reproductive Rights, Women's Health Development, Innovative Health Services for Homeless Youth, and Health Self Help

4.1.3.3 Mental Health

The role of the Mental Health Branch is to plan, fund and review specialist mental health services for children, adults and older people who have or are at risk of having a serious mental illness.

Victoria's Mental Health Service - the Framework for Service Delivery provides the strategic planning framework for mental health services in Victoria. The key element of the reform agenda is the redistribution of mental health resources from stand-alone Statemanaged institutions to community-based services.

4.1.4 DisAbility Services

DisAbility Services Program within the Department of Human Services is responsible for the implementation of government policy priorities that are aimed at enabling people with disabilities to live and participate in the community with appropriate support.

DisAbility Services Program works in partnership with people with disabilities, their families, carers and service providers, to meet the needs of clients, enhance the quality of life and increase opportunities for independence, choice and community participation. Further information regarding DisAbility Services can be obtained from the following documents:

> Intellectually Disabled Persons' Services Act 1986

> A Quality Framework for Disability Services Victorian Standards for Disability Services

A *State DisAbility Services Plan* that will include a clear plan for people with disabilities is also under development.

All DisAbility Services publications can be viewed on the Department's website.

4.1.5 Community Care Division

4.1.5.1 Placement and Support Services

Placement and Support Services provide a range of services for children and young people who are unable to live at home largely due to child protection concerns and where families are experiencing temporary crises. A major aim of Placement and Support services is to provide quality services which help to address the problems that led to placement away from home and assist family reunification, and where this is not possible, to provide quality accommodation and support with a view to assisting young people establish themselves within the community.

Home-based accommodation services such as foster care can create a more 'home like' environment for children and young people requiring out of home care. These services have grown dramatically in the past few decades and have led to a corresponding decrease in reliance on residential facilities. Never-the-less, there are approximately 178 facilities providing residential care for young people throughout Victoria. A major Capital Project commenced in 2000/2001 to replace or refurbish all facilities, so as to ensure the facilities reflect contemporary design standards and expectations of safety, robustness and amenity. The two statewide Secure Welfare Service facilities for young men and young women are also being improved. A new young women's facility was opened in 2000, and plans have been completed to redevelop the young men's facility during 2001/2002.

Juvenile Justice

The Juvenile Justice program provides a range of community correction and custodial services for young offenders. Recently the Department commenced implementation of the *Juvenile Justice Reform* Strategy (new initiatives: primarily targeted at the 17-20 years population appearing before the courts). The Strategy has three major aims:

- Diversion of young offenders from entering the Juvenile Justice system;
- Providing better rehabilitation for high risk young offenders; and
- Expanding pre-release, transition and post-release support programs for custodial clients to reduce the likelihood of reoffending.

Significant capital redevelopments have taken place in recent times with the substantial capital upgrade of the Melbourne Juvenile Justice Centre, Parkville Youth Residential Centre and Malmsbury Juvenile Justice Centre and development of quality, world class custodial accommodation designed to assist with the rehabilitation of young offenders and diversion from offending behaviours. Additional capital projects are in train to further improve services and supplement implementation of the Juvenile Justice Reform Strategy.

The Juvenile Justice Reform Strategy has also sought to develop quality community based accommodation services for young men and women to assist with the transition from custody to successful participation within the community.

4.1.6 Public Health

The public health program has a primary focus on the population rather than the individual. It focuses on the underlying causes of ill-health, has a strong commitment to preventive strategies and has a strong scientific, analytical and statistical basis.

4.1.7 Office of Housing

The Office of Housing has responsibility for managing all activities associated with the acquisition, management in use and disposal of residential facilities. Housing is responsible for all community accommodation properties, including asset management, maintenance and rental.