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April 9, 2012

**2010 CENSUS PLANNING MEMORANDA SERIES**

**No. 187**

MEMORANDUM FOR      The Distribution List

From:                      Arnold Jackson *[signed]*  
Acting Chief, Decennial Management Division

Subject:                    2010 Census Risk Management Process Operational Assessment  
Report

Attached is the 2010 Census Risk Management Process Operational Assessment Report. The Quality Process for the 2010 Census Test Evaluations, Experiments, and Assessments was applied to the methodology development and review process. The report is sound and appropriate for completeness and accuracy.

If you have questions about this report, please contact Karen Piskurich at (301) 763-9423.

Attachment

April 4, 2012

# **2010 Census Risk Management Process Operational Assessments Report**

U.S. Census Bureau standards and quality process procedures were applied throughout the creation of this report.

**FINAL**

**Karen Piskurich**

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**Decennial Management Division**

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## Executive Summary

The purpose of the 2010 Census Risk Management Process Operational Assessments Report is twofold: (1) to assess how well the 2010 Census management staff and workforce implemented the formal risk management process and (2) to inform the 2020 Census program.

The formal program risk management process was not implemented at the beginning of the 2010 Census lifecycle. The formal identification and documentation of program risks and respective ratings began in 2007 by senior staff in the Decennial Management Division who then submitted the risks and ratings to an integrated group of managers for review, approval, and for cross-organizational oversight of risk management activities. Next, mitigation and contingency plans for program risks were formally documented, approved, and executed.

It was assumed that the Operational Integration Teams were implementing risk management from the beginning even though the risk management plan was not issued until June of 2008. In the spring of 2011, staff in the Decennial Management Division conducted three lessons learned sessions with users of the risk management process, and one-on-one interviews with the former DMD Division Chief and the former Assistant Associate Director of Decennial Census and the American Community Survey. Users of the risk management process were asked what went well with the process and what did not work well. For those topics that did not work well, the facilitator asked these follow-up questions: (1) why did they not work well and (2) how could the process be improved.

The overwhelming majority of participants acknowledged that introducing a formal risk management process prompted staff to identify risks, mitigation activities, and put contingency plans in place if necessary. Further, having to report out regularly on risks, mitigation, and contingency activities forced staff to also review existing risks, identify new risks, and determine if mitigation activities were effective, and determine if contingency plans were necessary and adequate. Overall, participants reported implementing some degree of a formal risk management process was valuable.

Participants reported that the formal risk management process was instituted too late. Some teams and/or divisions already had their own process in place. They preferred not to modify their existing process to follow the formal process as this created additional work during dress rehearsal and production activities. At the program level, participants reported that it took too long to get formal mitigation and contingency plans in place, and thus delayed the regular review of how effective the mitigation plans were and preparedness should the risks become issues.

Participants offered suggestions for improving the 2020 Census risk management process. The areas for improvement fell into four categories: (1) Strategic Planning and Early Implementation, (2) Governance/More Clearly Defined Roles and Responsibilities (3) Improved Communication and Training, and (4) Focus on Integrating as Compared with Linking Program and Project Risks.

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# **1. Introduction**

## **1.1 Scope**

The purpose of the 2010 Census Risk Management Process Operational Assessments Report is to assess the 2010 Census risk management process implemented at the program and project level. The assessment will focus on the process that was used and how identified risks were managed throughout the process. It will highlight areas that the risk owners reported worked well and did not work well. Ultimately, the information gathered will allow the Census Bureau to improve its 2020 Census risk management process.

## **1.2 Intended Audience**

The 2010 Census risk management process Assessment is intended to inform stakeholders about the implementation of the 2010 Census risk management process.

# **2. Background**

## **2.1 Risk Management Prior to the 2010 Census**

In past Censuses the risk management process was neither a formal process nor was it integrated into management processes. However, that does not imply that risk management was not previously implemented. Measures were taken to reduce the probability of risks occurring, as well as for the preparation of contingency plans. There was no risk review board, no formal documentation of the risks in a register, and no probability and impact ratings.

The 2010 Census was the first time that the decennial census program implemented a formal risk management process.

## **2.2 Overview of Risk Management**

Risk management is a process used to ensure the identification and mitigation of potential problems that could negatively affect projects, programs, or an enterprise. To be effective, risk management must be an integral part of both program and project management.

Risk management is the identification, analysis, mitigation, and reassessment of risks throughout the program life-cycle. It also includes putting contingency plans in place should a risk become an issue. Implementing a formal risk management effort accomplishes the following objectives:

- Fosters early identification of strategies to reduce or eliminate the potential impact of known risks;
- Provides a structure for monitoring and documenting changes in risk assessment and for managing the response to those changes;
- Helps manage expectations of the performing organization, oversight organizations, and other stakeholders;
- Identifies areas where further study or analysis could potentially lower future risk; and

- Facilitates integration of operations/systems through early identification and resolution of risk that cuts across projects.

An important part of risk management is the continual reassessment of the program or project to evaluate how risks may have changed and to identify new risks. For maximum effectiveness, risk management must be performed using a common, systematic, and repeatable approach so that risks can be identified, managed, and unambiguously communicated to management, stakeholders, and executive-level decision-makers.

### **2.3 2010 Census Risk Management Key Players' Roles and Responsibilities**

The following are the key roles and responsibilities within the risk management process:

- Risk Review Board (RRB)- The RRB was responsible for the identification, monitoring, and control of program risks, including allocation of resources to conduct mitigation and contingency efforts. The RRB assigned individual risks to Risk Managers and reviewed and approved risk mitigation strategies, risk mitigation plans, and risk contingency plans proposed by Risk Managers. The RRB also authorized the execution of the contingency plans, reviewed the status of mitigation plans, and authorized changes to the plans and the status of risks based on feedback from the risk managers and other sources.
- Risk Managers- Risk Managers prepared, implemented, and statused risk mitigation strategies, risk mitigation plans, and contingency plans for risks assigned by the RRB.
- 2010 Census Operations and Systems Teams- These teams were responsible for day-to-day activities in support of the 2010 Census programs. They identified and managed risks when impact was confined to a single project or operation. If the potential for program impact existed, the risk was presented to the RRB, which determined if the risk needed to be managed by the program. Each project, including the risks it was tracking, was reviewed quarterly by the Census Integration Group (CIG) at regularly scheduled Program Management Reviews.
- Program Risk Process Manager- This manager was appointed by the Associate Director for Decennial Census and was charged with defining and overseeing the program risk management process. The Program Risk Process Manager had these responsibilities:
  - Developed and maintained the 2010 Census risk management process and risk process documentation;
  - Oversaw the implementation of risk management support tools and risk management training;
  - Scheduled, set the agenda for, and facilitated RRB meetings;
  - Maintained a data repository that included the program risk register, approved mitigation plans, and approved contingency plans;
  - Maintained a record of changes to the program risk register, approved mitigation plans, and approved contingency plans; and
  - Ensured that risk exposure reassessment was conducted in conjunction with key program changes.

## 2.4 Definition of Program and Project Risks

The 2010 Census Risk Management Program governed two types of risks: *program risks* and *project risks*.

Program risks are defined as risks that could jeopardize the successful implementation of the 2010 Census. They were identified and managed through the (RRB). 2010 Census program risks generally fell into one of the following categories:

- Staffing;
- Budget;
- Public Cooperation;
- Quality Risk;
- Operations and Systems;
- Continuity of Operations; or
- Schedule.

Project risks are defined as risks that could jeopardize the success of an individual project. They are owned and managed by Integrated Product Teams (IPTs) and help to inform program risk. Often, they are more technical or subject matter in nature, and relate to achieving the project's objectives rather than the program's objectives. A project risk that has the potential to impact program goals or objectives can be escalated to the RRB for evaluation.

## 2.5 2010 Census Program Risk Management Process

The formal risk management process began in 2007 with the identification of program risks. However, the 2010 Census Risk Management Plan, which describes the risk management process, was not released until June 2008. The risk management plan was revised to v.3.0 and reissued in October 2010. This version more accurately describes the actual process which was used. The following is a summary of how the process was implemented. Initially, the RRB reviewed the state of program risks during a series of weekly meetings that included these activities:

- Defined the initial set of program risks;
- Developed the initial set of risk statements, risk probabilities and impact ratings and explanations;
- Assigned Risk Managers;
- Reviewed and approved risk mitigation strategies and risk mitigation plans;
- Determined which risks required contingency plans;
- Reviewed and approved contingency plans;
- Identified new program risks; and
- Closed risks.

Once the risk management process was established for the program and the mitigation plans for the initial set of program risks were approved, risk reviews became focused on the status of the risk mitigation plans. Risk Managers status the mitigation plans monthly using the Mitigation Statusing Template. Risk Managers also use this template to provide descriptions of any changes to environmental factors that could affect the risk, propose modifications to the plan, or propose changes to probability and impact ratings. Following the incorporation

of RRB comments during the monthly review, the completed templates are maintained as a documentation trail for approved changes to the mitigation plan.

In addition to decisions made during the monthly mitigation plan review, the RRB may at any time implement these activities:

- Direct changes to mitigation and contingency plans;
- Review new candidate program risks, including risks elevated from projects;
- Review and approve mitigation strategies and plans for recently identified risks;
- Review and recommend contingency strategies and plans for recently identified risks;
- Identify new program risks; and
- Close program risks.

The ratings for all program risks are maintained in the risk management software tool. This tool provides a number of built-in reports that allow access to status information.

#### Risk Register

The risk register contains the risk identification risk name, risk statement, risk manager's name, probability and impact ratings, and explanations for each of these ratings.

Additionally, the risk register contains an indication of the risk priority [where high priority is Red (R), medium is Yellow (Y), and low priority is Green (G)], and an indication whether the risk is open or closed. It also indicates a time frame in which the risk is likely to occur.

#### Change Log

Along with the register, a change log is maintained. For each change to the risk register, the log contains the following:

- Date the change was made to the register;
- Risk identification;
- Version of risk register in which the change was implemented;
- What the change was;
- Who approved the change;
- Why the change was made; and
- What, if any, changes were made to the ratings.

## **2.6 Implementation Timeframe for 2010 Census Program Risk Management Process**

The 2010 Census did not start off using the complete risk management process as described above. Staff had to identify the risks, assign initial ratings, and baseline initial mitigation and contingency plans. DMD senior managers began to identify program risks in the summer of 2007. It was not until December of 2009 that the first regularly scheduled meeting took place to review the status of all risks, along with all approved mitigation plans and drafted contingency plans in one setting.

**Table 1: 2010 Census Program Risk Management Milestones**

Milestone	Timeframe
Identify program risks	Summer 2007
Conducted risk review as part of the Census Integration Group (CIG)function	April 23, 2008
Baseline the risk register	June 1, 2008
Initial risk management plan approved	June 6, 2008
Mitigation plans approved for baseline risks	Started June 17, 2008 through June 22, 2009
First RRB meeting outside of CIG	January 6, 2009
Risks that require contingency plans identified	June 23, 2009
Baseline contingency plans approved	Approx. July 2009 through mid-2010
Kickoff of monthly RRB status meeting	December 18, 2009
Transition to electronic RRB	June 1, 2011

**2.7 2010 Census Project Risk Management Process**

There was no centralized project risk management office that served the project risk management process. General guidance detailed in the Risk Management Plan was provided to project members. Teams were also given instructions and deadlines at Team Leaders meetings. Each project was given the opportunity to receive risk management coaching. This coaching was available to project risk managers as often as they requested it. The project risk managers set the agenda for the coaching session(s) which were provided by the MITRE Corporation.

Project risk guidance followed the intent of the program risk management guidance by focusing on the identification, analysis, and mitigation of potential risks to the success of the project.

The 2010 Census Operations and Systems Teams were asked to post their current team risk register to the electronic Census Operations Center (eCenOC) once a month. There was no formal review of the project registers submitted and there was no enforcement of the request to update the posted registers.

**2.8 Implementation Timeframe for 2010 Census Project Risk Management Process**

In November of 2007, teams were expected to provide risk registers along with mitigation and contingency plans to the 2010 Census Risk Process Manager. The 2010 Census Risk Process Manager and other senior managers planned to take the team risks and link them to the program risks in an effort to integrate the program and project risks.

Teams were given little formal guidance on how to implement risk management prior to the release of the 2010 Census Risk Management Plan in June of 2008.

**Table 2: 2010 Census Project Risk Management Milestones**

Milestone	Timeframe
Call for Project Risk Registers	November 7, 2007
Call for Mitigation and Contingency Plans	November 7, 2007
Initial Risk Management Plan Approved	June 6, 2008
Project-Level Risks linked to Program-Level Risks	July 11, 2008
DMD provided coaching, mentoring, and guidance to Team Leads/Risk Managers	October 21, 2008 through summer of 2009
Project-Level Risks Stated at Program Management Review Meetings	Shortly after October 9, 2008

### 3. Methodology

Quantitative and qualitative research methods were employed to assess the effectiveness of the 2010 Census risk management process.

#### 3.1 Quantitative Program Risk Process Questions to be Answered

Program Management Branch staff in DMD collected 2010 Census risk metrics.

##### Program Metrics

1. How many program-level risks were identified?
2. How many program-level risks have mitigation plans?
3. How many program-level risks have formal contingency plans?
4. How many open program risks were managed each month?
5. What percentage of risks were rated red, yellow, and green each month?
6. How many open risks went down in severity rating from one month to the next?
7. How many open risks went up in severity rating from one month to the next?
8. How many risks were opened and closed each month?
9. What were the number of open risks and number of RRB meetings held by month?

The program risk metrics were collected starting July 2008 and ending in April 2011 for this report via an Excel spreadsheet, which was updated weekly. Program risk metrics were collected by risk management process staff who kept the risk tool and supplemental Excel spreadsheets (which included the risk register) current, since the risk tool could not produce required reports. In other words, the risk management process staff extracted information from the risk tool to reformat, as required, or re-entered the same information that was in the risk tool into Microsoft products, which were custom designed to produce the required reports.

The risk tool calculated the ratings and the risk priorities, and then plotted the ratings on the five-by-five matrix. The information needed to populate the risk register was also entered into an Excel spreadsheet. The risk register was maintained entirely outside of the risk tool. The risk register was created in Excel along with the other reports posted to the eCenOC. To meet the reporting requirements, the information for the weekly risk report, which also went

into the monthly OMB briefing package, was extracted from the risk tool and displayed in PowerPoint.

Due to the manual nature of reporting and tracking, the risk management process staff thoroughly reviewed inputs and outputs into the tool, as well as the contents of the reports.

#### Project Metrics

1. How many teams maintained a risk register?
2. How many risks did each project manage over the course of their operation(s)?
3. How many teams conducted regular risk statusing meetings?

The project metrics were collected well after the risk management process was initiated. The risk process management staff sent an email to each team in April 2011 requesting answers to the preceding questions. The project risk metrics are self-reported without verification from the risk management process staff.

### **3.2 Qualitative Risk Management Process Questions to be Answered**

#### **3.2.1 Lessons Learned Approach and Preparation**

Program Management Staff conducted qualitative research to assess the effectiveness of the 2010 Census risk Management process. Unlike the quantitative research which used different questions for project and program risk processes, the qualitative research approach asked the same two questions of all participants.

1. What worked well with the risk management process?
2. How can the risk management process be improved?

Risk management process staff worked with a trained facilitator in Human Resources Division (HRD) to plan lessons learned. The trained facilitator recommended the two strategies that were implemented:

- Use a root cause analysis approach to conduct the lessons learned.
- Have a mix of people with varying process roles in the same session, as opposed to having a group of only risk managers or only risk management process staff.

The root-cause analysis approach requires that the trained facilitator conducts the focus group without a list of detailed questions to drive the discussion.

Risk management process staff developed a list of all the risk management process users (except the former Assistant Associate Director of Decennial Census and the American Community Survey and the former DMD Chief) and invited them to attend a lessons learned session. Participants had three dates to choose from and the schedule was able to accommodate all interested persons.

In preparation of the lessons learned session, a framework document was created and sent out to the attendees prior to the lessons learned session. The purpose of the framework document was to give attendees an idea of possible discussion topics. They were asked to think of one thing that worked well for each topic and one thing that did not work well. The framework document contained the following topics:

- Roles and Responsibilities;
- Distinguishing Project and Program Risks;

- Risk Analysis;
- Mitigation Planning;
- Contingency Planning; and
- Status Reporting.

See Appendix B for copy of the framework document.

Lessons learned sessions were conducted April 5, 2011, April 11, 2011, and April 18, 2011. Table 3 shows how many people planned to attend and the actual attendance in each session by role.

**Table 3: Lessons Learned Participation by Risk Management Role**

Role*	Lessons Learned #1		Lessons Learned #2		Lessons Learned #3	
	Planned	Actual	Planned	Actual	Planned	Actual
Risk Review Board	2	2	1	1	3	2
Program Risk Manager	2	1	3	2	3	2
Project Risk Management Role	7	8	9	8	2	2
Risk Management Process Staff	1	1	0	1	2	2
<b>Total</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>10</b>	<b>8</b>

\*Several people played more than one role in the 2010 Census risk management process. For example, certain participants were on the RRB and a program risk manager. When participants had more than one role, they were included in the counts for each role that they had. Thus, in some instances, the number of roles was greater than the number of participants.

### 3.2.2 Root Cause Analysis Example

The root cause analysis approach requires that all people involved in the process attend the session. When conducting a root cause analysis, one finds that when asking why something worked or did not work well the root cause takes you either upstream or downstream in the process. To identify actual causes, you must have all the different role players in the room. After you identify what did not work well you probe by asking why it did not work well and then ultimately how you would fix it. Here is an actual example from one of the Lessons Learned sessions:

This issue was identified after asking what did not work well with “Mitigation Planning”:

“Difficult to keep team engaged in managing risks after initially assessed.”

Participants of the lesson learned session identified these root causes of the issue stated above:

- One person was responsible for doing it all.
- The risk management process staff did not communicate well what would happen once they posted a register. If nothing happened, they did not communicate that. The original plan was to have a dynamic relationship between project and program risks. It stopped after the linking was done. The projects did their own thing. There was no QC, no double-checking of postings.
- There was time when the risk management process staff was calling upon the team, when the team was in the middle of the operation, and the team did not have



time to sit down right then. The team had put together enough information and the risk management team would then take over, instead of the team sitting down every time when the template was due to be updated (once a month). In the beginning it was more than once a month. Others agreed with this. It had to be done with all the team because it touched all the divisions.

- Teams had competing priorities: competed with production. It is difficult to focus on risks when you have current production work with the census.
- Some of the team members felt they were putting more time into mitigation and contingency planning than what they were supposed to do to get operations off the ground. It was too time consuming.
- Teams do not know what will be on their plate and response must be immediate.
- Teams have competing priorities: the Risk Manager had to get in contact with someone doing the operation in order to get an update on the project's risks.
- In addition to this formal risk mitigation process, we have an informal process within the organization that sometimes is not identified at either project or program level to keep it off the radar. It is the way we have operated for the past 40 years. It just not having numbers, metrics, colors, etc.
- These started as a result of something going wrong and folks decided to get together. It was not planned from the beginning.

Proposed solutions:

- Have formal risk management training that is "hands-on" with real census examples. Offer both program level and project level risk management training.
- Obtain feedback from Risk Management customers on an ongoing basis for things like templates, reports, etc.
- Put a User Comments section on the status report that is due monthly.

## **4. Limitations**

### **4.1 Lessons Learned are Not Requirements**

The lessons learned were never intended to be a requirements workshop or a substitute for getting feedback from the people who will use the 2020 Census risk management process. Therefore, these lessons learned are not intended to be a stand-alone set of requirements of 2020 Census risk management.

Not all comments made during Lessons Learned sessions became a topic of discussion or were clarified enough to add relevance to this study. Comments were expressed, recorded, but not clarified due to the nature of this kind of lessons learned process.

### **4.2 Scope Limited to 2010 Census Production**

This study is limited to the process that was started in 2007 and to the metrics which were collected after that. This was also the start of the production phase of the 2010 Census. Therefore, this assessment does not describe risk management efforts that took place earlier

in the decade during the 2010 Census research and testing phases and the 2008 Census Dress Rehearsal.

#### **4.3 Absence of Risk Management Process Schedule**

The Program Management Branch documented the formal risk management process at the program level in meeting notes, metrics and mitigation and contingency plans. However, the timing of the process and the outcomes of the process were not tracked in a schedule. Therefore, the discussion of what and when risk activities took place was reconstructed after the fact using emails, date stamps on documents, and meeting notes.

#### **4.4 Limited Program Risk Metrics**

Although the process of producing a risk register began in the summer of 2007, the tracking of program risks did not begin until July 2008 which was one month after the program register was baselined.

#### **4.5 Risk Management Process Continues through 2013**

The risk management process will continue until the end of the Census in 2013. Therefore, the process and the metrics described in this report only reflect the risk management process when the data were gathered, which was through April 2011.

#### **4.6 Excludes Informal Risk Management Process**

The Risk Process Manager and Program Management Branch facilitated and documented the program-level risk management process from its 2007 inception, documenting decisions and process changes as they occurred. However, not all program risk management efforts occurred inside the formal risk management process, and therefore, were not formally tracked. Those informal risk management processes are out of scope for this report.

#### **4.7 Lack of Risk Management Process Staff to Facilitate at the Project Level**

There was no comparable risk process management office for tracking project-level risk metrics or for facilitating the project risk-level management. Therefore, this assessment relied on lessons learned from integrated teams to gain an understanding of how project risk management was actually implemented.

## **5 Results**

### **5.1 Quantitative Program Risk Management Research Questions**

#### **5.1.1 How many program-level risks were opened?**

A total of thirty-five program risks were opened and managed from July 2008 through May 2011. Twenty-five risks were agreed to and baseline at the start of the formal program risk management process. Ten risks were opened after the register was baseline.

### **5.1.2 How many program-level risks have mitigation plans?**

Twenty-nine program risks had mitigation plans. **Source#7** The following risks were closed before the formal mitigation plans were drafted :

- DLG-0015 System(s) Breakdown and/or Integration Problems
- DLG-0016 Handheld Solutions
- DLG-0019 Address Canvassing and Group Quarters Validation Operational Control System Solutions
- DLG-0020 Failure of Operations and Systems Components
- DLG-0021 System Sizing and Performance Assumptions
- DLG-0022 Adequate Testing

### **5.1.3 How many program-level risks have formal contingency plans?**

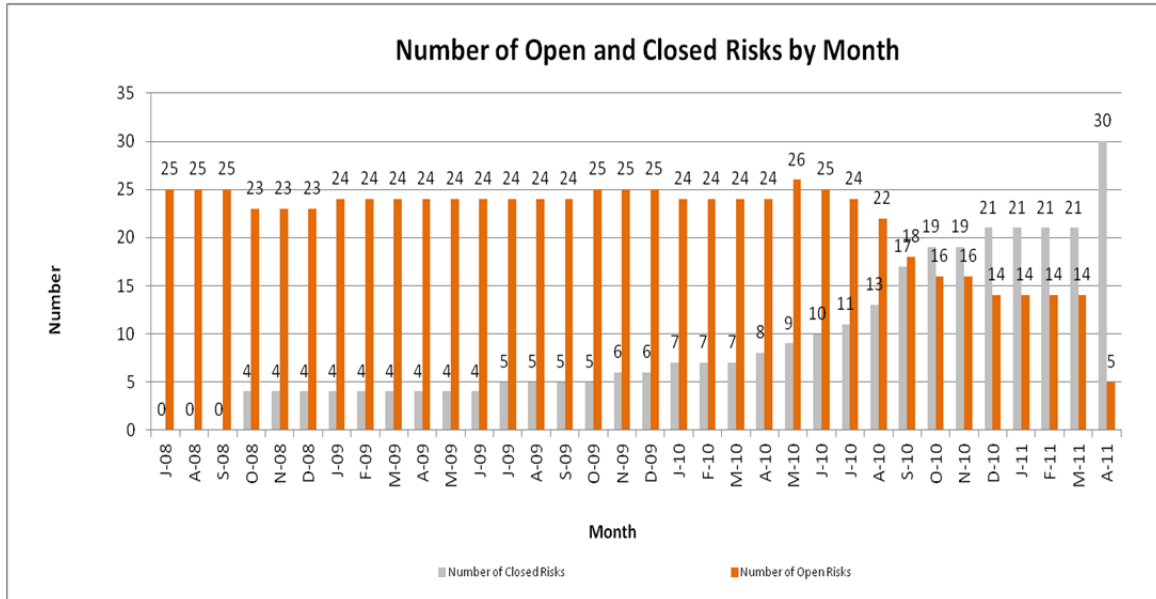
The RRB required that formal contingency plans be drafted and approved for these risks:

- DLG-0003 Uncertainty of Assumptions in Cost Model
- DLG-0004 Continuing Resolution
- DLG-0005 Insufficient Funding
- DLG-0006 IT Security Breach
- DLG-0007 Loss of Confidential Data Affecting Response
- DLG-0011 Housing Unit Duplicates and Misses
- DLG-0023 Major Disaster's Effect on Population
- DLG-0024 Continued Operations of Critical Infrastructure During Disasters
- DLG-0025 Falling Behind Schedule on Key Milestones
- DLG-0026 2010 Operational and Systems Failures
- DLG-0028 Within-Household Person Overcoverage and Undercoverage
- DLG-0030 H1N1 Influenza and Similar Contagious Illnesses Affecting Non-Regional Census Centers and Non-Local Census Offices Activities
- DLG-0032 H1N1 Influenza Affecting Regional Census Centers and Local Census Offices Activities

All other program risks that did not have formal contingency plans were to follow the Rapid Response Approach should the risk become an issue. See Appendix C for a description of the Rapid Response Approach.

### 5.1.4 How many open program risks were managed each month? How many risks were opened and closed each month?

Figure 1: Cumulative Number of Open and Closed Risks by Month



There was not a large spike in the number of open risks. From July 2008 through August 2010 the number of open risks ranged between 22 and 25. Beginning in September 2010 the RRB started to close out program risks. By April 2011 only 5 risks remained open.

### 5.1.5 What percentage of risks were rated red, yellow, and green each month?

Figure 2: Percentage of Risks by Ratings by Month

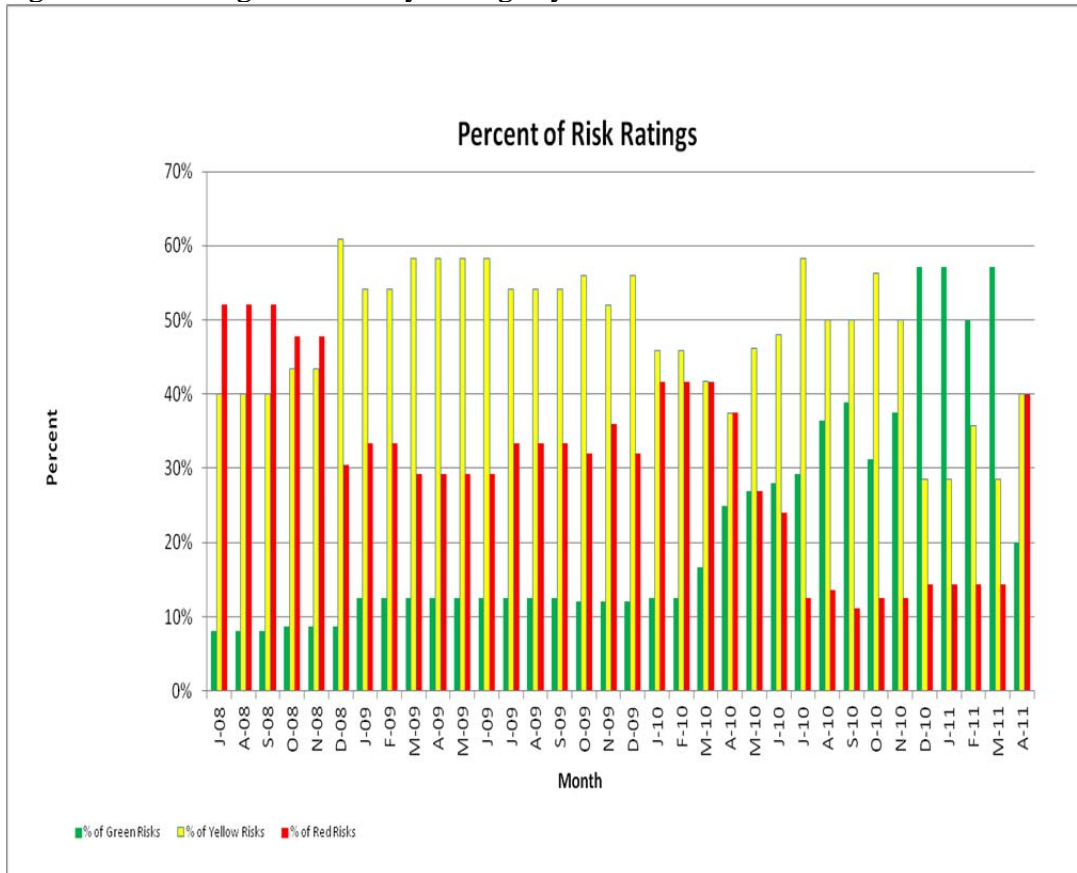
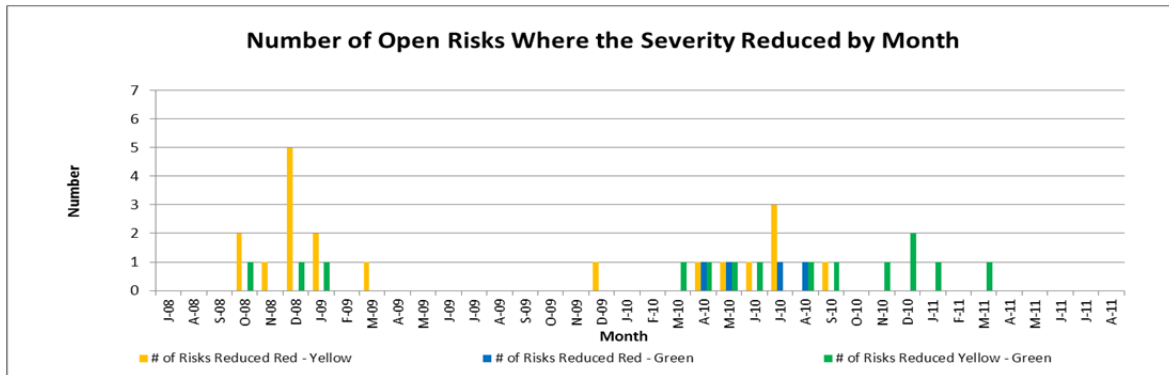


Figure 2 shows the percentage of risks rated red, yellow, or green each month. The percentage of red risks hit their peak in the second half of 2008. The majority of risks were green by the end of 2010. There was a spike in the percentage of red and yellow risks in April 2011; however, there were only 5 risks open that month.

### 5.1.6 How many open risks went down in severity rating from one month to the next?

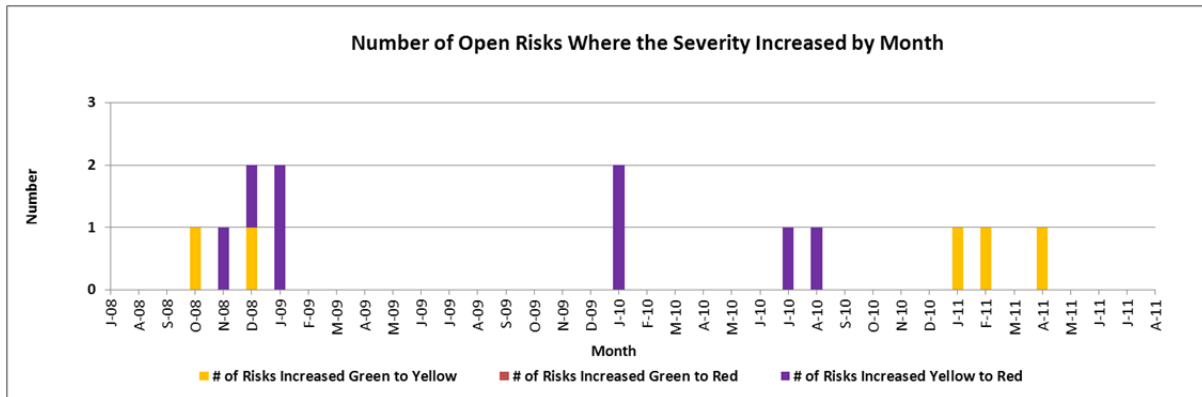
Figure 3: Number of Risks Where Severity Ratings Decreased by Month



In December of 2008 five risks were downgraded from red to yellow which was the most downgrades in one month. Also, as one might expect as the operations closed out more risks were downgraded.

### 5.1.7 How many open risks went up in severity rating from one month to the next?

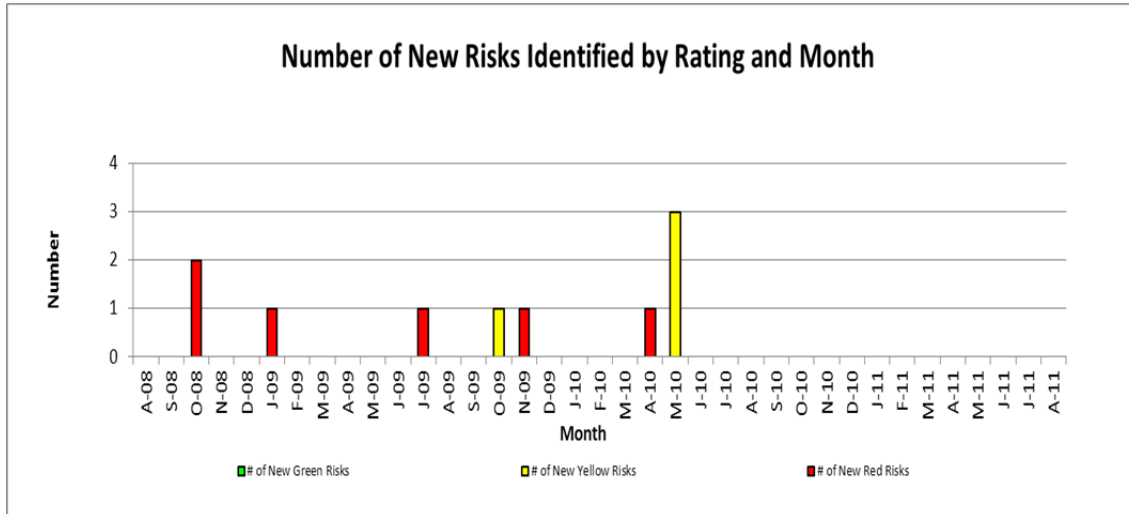
Figure 4: Number of Risks Where Severity Ratings Increased by Month



The months of January of 2009 and January of 2010 saw the biggest jump in ratings increasing in severity as 2 risks went from yellow to red.

### 5.1.8 How many risks were opened each month?

Figure 5: Number of New Risks and Ratings by Month



In April 2010, the RRB opened 3 new risks, which was the most for any one month. The 3 new risks were: DLG.035 Insufficient Funding for FY 2011; DLG.036 Insufficient Funding for FY 2012; DLG.037 Insufficient Funding for FY 2013.

### 5.1.9 How many risks were closed each month?

Figure 6: Number of Risks Closed by Month

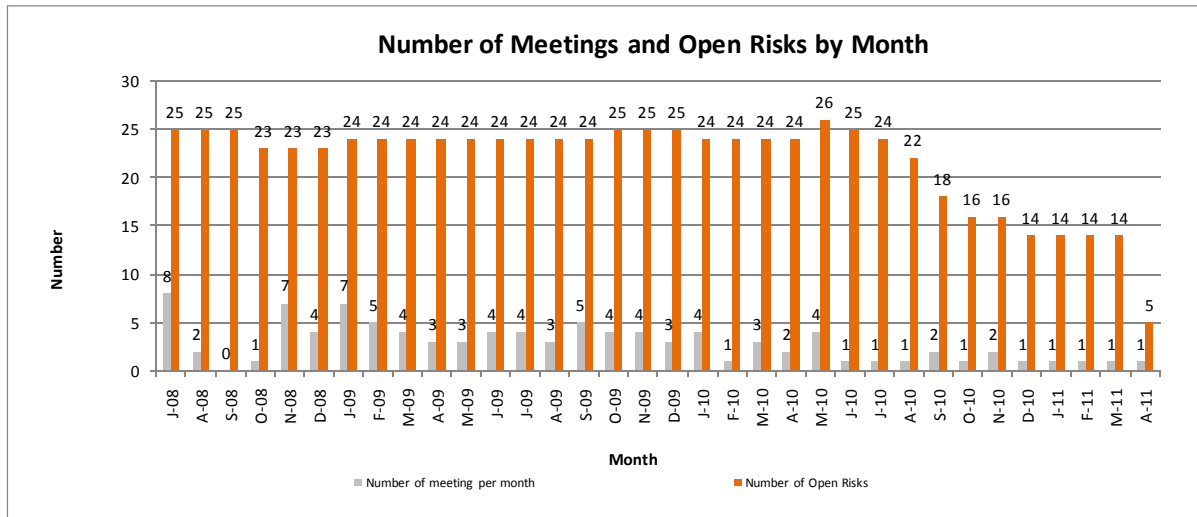


In October of 2008, four risks were closed as they were combined into one new risk. The 3 closed risks were:

- DLG-0015 System(s) Breakdown and/or Integration Problems
- DLG-0020 Failure of Operations and Systems Components
- DLG-0021 System Sizing and Performance Assumptions
- DLG-0022 Adequate Testing. The new risk was DLG.026 2010 Operational and Systems Failures

### 5.1.10 What were the number of open risks and number of RRB meetings held by month?

Figure 7: Number of Open Risks and RRB Meetings by Month



This chart shows that as time went on, there were fewer RRB meetings held. This chart is limited in that it shows number of meetings. However, starting in December 2009, the RRB met once a month for approximately 3 to 4 hours at a time. The meetings grew shorter over time as there were fewer risks to manage.

## 5.2 Quantitative Project Risk Management Research Questions

### 5.2.1 How many teams maintained a risk register?

The 2010 Census Architecture identified 44 Operational Planning Areas (or operations) for the 2010 Census. However, there is not a one-to-one match of project teams to the Census operations. Some teams were responsible for multiple operations because there were more operations than teams.

The assessment asked team leaders to answer this question: did your team maintain a risk register? All 44 operations were covered in a project-level risk register .

### 5.2.2 How many risks did each project manage over the course of their operation(s)?

We asked the teams to provide the number of risks managed over the course of the operation. We combined the risk totals for all who responded. There were a total of 1,390 project risks. The average number of risks for each team risk register is 35.6 , and the median number of risks is 27 .

### 5.2.3 How many teams conducted regular risk status meetings?

All teams that responded to the email said they conducted regular risk status meetings .

## 5.3 Qualitative Risk Management Research Questions



### 5.3.1 What worked well with the risk management process?

Participants were asked to provide what worked well with the risk management process. These are the eight major themes identified in the participant feedback:

- Demonstrated Importance of Risk Management;
- Coaching;
- Status Reporting;
- Risk Analysis;
- Roles and Responsibilities;
- Contingency Planning;
- Mitigation Planning; and
- Managing Program and Project Risk.

#### **Demonstrated Importance of Risk Management**

Participants overwhelmingly stated that the process forced them to consider risks. They had to manage them by mitigating risks and by preparing for realized risks. Participants reported that at first it may have seemed like instituting formal risk management was a check box activity, but came to realize that it was a valuable activity.

*“It was not just an exercise. We have a culture of risk management. This risk management process was important. There's been a culture shift now that we've learned the process and we can build from it. It was acknowledged that we were forced into it around the spring of 2008.”*

*“This was the first time we had to develop and do risk analysis, so it brought in a uniform culture across divisions and team. This was a good shift.”*

*“Getting risk management process in place that many people actually used.”*

#### **Risk Management Coaching**

For some staff risk management was a new process that they had to learn. All staff had to learn the 2010 Census formal Risk Management Process and what was required by that particular process. To expedite the implementation of the formal risk management process and to provide some assistance to teams in the middle of the 2008 Census Dress Rehearsal and the implementation of the 2010 Census. Risk Management Coaching was available to program and project risk managers. MITRE provided the majority of risk coaching and team members could schedule as many risk coaching sessions as were necessary. Risk Coaching was done at Census Headquarters. The coach walked the team members through the process, pointed team members to the tools and templates, and provided hands on instructions on how to write risk statements and on how to prepare mitigation and contingency plans. Many lessons learned participants mentioned or agreed that this coaching was valuable.

*“The overall training and handouts along with the MITRE coaching was a real plus This defined the process for us. It's nice to have a go-to entity for this. So many programs are so over-arching this helped a lot.”*

*“The person from MITRE sat down and showed us how to do everything. He was very professional and very helpful. This was seconded by many in the group. Having someone who knew what risk management is and bringing it down to the team level.”*

*“Since this was my first time working on a risk management register, the coaching sessions were really beneficial in understanding the risk management process. The coaching sessions also enable my team to correctly identify, analyze and mitigate risks.*

*The instructor's knowledge and patience on the subject worked very well in coaching the project level risk register. In addition, follow up meetings with the instructor were very beneficial to ensure that our team was on the right track.”*

### **Contingency Planning**

The 2010 Census Risk Management Plan required both program and project risk managers to identify and document risks that should have a contingency plan. Participants reported positive experiences about their contingency planning efforts:

*“In terms of the template and putting in contingency plan, the ideas gave us a 'starter'. Because we had to actually start thinking about mitigation vs. contingency. So when we had to put a contingency plan in place, we had something to start with. We could talk about which risks could complicate things.”*

*“The process of documenting the contingency planning into the risk register. This helped us to define what is in case we had to implement it.”*

### **Mitigation Planning**

The 2010 Census Risk Management Plan required both program and project risk managers to identify, document and execute mitigation activities. Participants reported positive experiences about their mitigation planning and execution activities:

*“At the project level this helped us to effectively monitor the risks and helped us to identify potential risks.”*

*“It was worth our effort to do mitigation planning at the program level because it made us realize how truly vulnerable we were in some regards.”*

*“Our formal mitigation plans were one of the most helpful forms of documentation we could provide to oversight to show that we were taking risk management seriously.”*

*“Having a process in place where we could identify what mitigation work was taking place and seeing where contingency work was needed even if we didn't have the time to formulate and /or execute substantive contingency plans for every risk.”*

Although mitigation and contingency plan comments are separated out above, it is worth noting that participants often described the benefits of mitigation and contingency planning and execution together:

*“It was important that upper management had an opportunity to see the levels of detail that needed to occur for successful planning. For mitigating risks upper management had an opportunity to see the details: impact on resources, cost, schedule, etc. This shows management what is really needed to make an operation a 'success'.”*

*“Prior to 2010 management was aware of a lot of this; they knew they had contingencies and mitigations but it wasn't all documented. This gave us good documentation across the program for all the risk mitigation and contingency planning. Gave a sense of satisfaction that if things don't go as planned, we have thought about a direction that we should go in or we have something already in place to mitigate. A well-documented repository of risk management stuff.”*

### **Status Reporting**

The process required project and program risk managers to report out regularly changes to their risk ratings, as well as how successful mitigation activities were and how ready contingency plans were should they need to be implemented.

*“The status meetings on Fridays were helpful. Everyone came and went over their status. And the board made sure things were updated as appropriate. They were conducted efficiently and thoroughly.”*

*“Having all the risk registers in the Ops Center website. It was all together.”*

*“The monthly program status meetings where all the risk managers and the RRB got together and review the register, there was a good opportunity for folks to look at the big picture and see how things are connected. This information fed into the monthly OMB through DOC report.”*

*“The MSR information we presented to OMB each month that showed changes in the ratings demonstrated that we were actively managing risks.”*

*“The monthly due dates made us go back and evaluate things. Applies some discipline to the process.”*

*Having the Risk Review Board meetings, risk register, 5x5 matrix, and briefings of CIG were very useful for helping others to gain confidence that we knew what we were doing.*

### **Risk Analysis**

To be able to produce updated status reports described above, risk managers had to regularly analyze risks. This included review and update of the risk ratings and the mitigation and contingency plans. 2010 Census risk management process staff provided templates (risk register, mitigation plan, contingency plan) to help teams perform the risk analysis.

*“Risk analysis documentation tied the risks together for everyone to see what the real risks were and what were the residual risks as a result of taking a particular action. Things that were not considered important, the documentation and the groups*

*working well together showed it was good. And it showed that the Bureau needed a COOP plan for regular work.”*

*“The risk analysis as well as mitigating and contingency planning, working with teams it was valuable for team members to think about what could happen; when could the risk be realized; it's a different way. We never used this in 90 or 2000. It gave a process to analyze what could happen.”*

*“The rating scale was useful even if it was not precise”*

### **Roles/Responsibilities**

Participants were asked if they understood their roles and responsibilities in the risk management process.

*“It was successful in having risk owners and a defined role for them with a reporting out process and a responsibility for mitigation and updating risks.”*

*“The overall training and handouts along with the MITRE coaching was a real plus. This defined the process for us. It's nice to have a go-to entity for this. So many programs are so over-arching this helped a lot.”*

### **Managing Program and Project Risk**

Participants were asked what worked well with the delineation of program and project processes, as well as distinguishing program as opposed to project risks. Particularly, how well did the interaction between program and project risk management processes work? How did the project of elevating risks work?

*“The process of linking the project risks to the program risks was helpful.”*

*“Having a process for program level risks that transcended a project was necessary. In earlier parts of the decade we did not have this.”*

### **5.3.2 What did not go well with the risk management process?**

Participants of lessons learned were asked to provide what worked well with the risk management process. Areas for improvement include:

- Timeliness
- Understanding difference between mitigation and contingency concepts
- Moving risks to issues
- Reporting Burden
- Tools
- Program and Project Risk Integration
- Clear Roles and Responsibilities
- Maintaining Continued interest
- Identifying New Risks

The two areas for improvement mentioned most often were (1) timeliness and (2) process started too late.

## **Timeliness**

Participants reported that it took too long to get the formal program risk register, formal program mitigation and formal program contingency plans baselined. This delayed the start of the regular risk review meetings where we stasured all program risks during one monthly meeting.

Participants who worked on the program and project risk management processes reported that the formal risk management process started too late. Some divisions and teams already had a risk management process in place that did not necessarily conform to the “new” process they were being asked to follow.

*“Took longer than expected to get regular status meetings up and running.”*

*“Took too long to get the mitigation and contingency plans documented and stasured.”*

*“We didn’t execute contingency planning as we should have. We did not start early enough to identify alternative solutions / contingency plans so that we could have requested funding to develop the key contingencies into viable alternatives.”*

*“Lack of a program level risk management process, and thus program risk register, until after the dress rehearsal.”*

## **Misunderstanding Risk Management Process Concepts**

Participants reported difficulty understanding the difference between mitigation activities and contingency activities well into the formal risk management process.

*“It was confusing trying to distinguish what the mitigation strategy was vs. the contingency plan.”*

*“Continuing difficulty of RRB members differentiating between “mitigation” and “contingency” and making decisions on both.”*

## **When Risks Become Issues**

Risk and issues are related in that a realized risk is considered an issue. Therefore, when a risk is realized it should move from the formal risk management process to the formal issues management process. At the program level, risks became issues. However, those risks never transitioned to the formal issues management process.

*“When a risk became an issue, it was a whole other process that had to be dealt with. We tried hard to not make things ‘issues’ because it created extra work for us.”*

## **Reporting Burden**

The 2010 Census program classified work by specific operations and by teams. This was a change from Census 2000 where operations and teams were a one-to-one match. For the 2010 Census several operations could be one team or vice versa. For instance the Census Coverage Measurement maintained one risk register for all of their operations. However, the requirement was for them to have a separate risk register for each CCM operation.

Participants of the lessons learned thought the requirement should be more fluid in that teams should have been able to produce one risk register for the operation.

### **Need for Improved Tools**

The risk tool that we used at the program level was not adequate for producing reports and not adequate for holding mitigation and contingency plans. The lack of reporting capabilities forced program risk management staff to copy and paste information into other software packages to produce reports. Moreover it required staff to manually enter the same data multiple times, thus increasing the risk for data entry mistakes.

Although we had an approved standard risk rating scale for the probability and impact ratings, the RRB struggled with the subjectivity and ambiguity of the scale at times.

*“Struggled at the program level with assigning consistent impact ratings even though we had a scale. For example, cost impact to a risk, even though we had a standard scale. Should the scale have used the cost of the entire program or the budget for that FY or some component of the program or lifecycle.”*

### **Linking/Integrating the Program and Project Risk Management Processes**

Other than the exercise of linking every project risk to a program risk which was a one-time exercise, there was not much integration of the program and project risks.

*“Didn’t do a good job at linking program and project risks.”*

*“The project or team risk process was not integrated with program risks and status process. The project risks had no centralized reporting area. They were given coaching and were told to post their registers to the Ops Center once a month. We never sent out the slide that showed where the risks ended up each month at the program level.”*

### **Need for Clearer Roles and Responsibilities**

An unexpected lesson learned emerged from the exercise of asking participants to identify their role in the risk management process. Many of the staff who worked on project risks described themselves as program risk managers mainly because operations are often referred to as programs. Therefore, staff who worked on operations assumed they were program risk managers. However, the program risk manager was defined in the Risk Management Plan as a person who manages a program risk. The lesson learned is that the concept of program and project risk and risk managers was not communicated well.

The Risk Management Plan did not provide guidance to teams on how to assign ownership and how to manage shared risks.

*“Our project team had difficulties in deciding who should own the risk. For example, one of the biggest risks that our team had was also a big risk on another team.”*

*“Getting buy-in from non-DMD team members. They did not think much of project management process in general”*

Participants also reported that the program risk management process did not integrate the Bureau-wide risk efforts by the Bureau’s contract offices and contractors.

*“DMD Program risk management was in a silo separate from program risks in the PMO/contract registers”*

### **Better Process for Identifying New Risks**

We did not have a clearly defined process in place at the program level for identifying new risks once the initial set of program risks were identified.

*Didn’t have a solid process for identifying new risks; no structure to force us. This also includes elevating a project risk to a program risk.*

## **6. Related Evaluations, Experiments, and/or Assessments**

2010 Census Issue Management Assessment

### **7. Key Lessons Learned, Conclusions, and Recommendations**

The key recommendations were derived from the lessons learned and the interviews with the former Chief of the Decennial Management Division Census and the former Assistant Director for American Community Survey and Decennial Census.

A summary statement describing the main theme of each affinity group, together with a list of the original recommendations contained in each group is provided in the following table.

**Table 4: Suggestions for Improving the Decennial Risk Management Process**

Improvement Category	# of times offered as a suggestion
Strategic Planning & Early Implementation	26
Governance/ Roles & Responsibilities	23
Communication and Training	14
Integrate as Compared with Link Program/Project Risks	2

#### **7.1 Improved Strategic Planning and Early Implementation**

Participants recommended that more strategic planning go into the formal risk management process before the users have to implement the process. In addition to the strategic planning, participants wanted a solid risk management process to be in place at the start of the project lifecycle.

*“Take a look when programs start to support the census and make sure that the overall census process has been laid out and define how each program area is to manage their program (and how it fits into the overall process).”*

*“Make sure program areas know in advance what will be required of them for risk management (e.g. products---risk register, operational plans, team charter, scheduling, and for other overhead products).”*

*“Be practical in whatever we implement! Consider the tremendous amount of information that we have to deal with.”*

*“If we had contingency planning earlier, we could have used contingency planning to justify why we needed more funds and to receive guidance on contingency efforts should have been focused on.”*

## **7.2 Improved Governance/ More Clearly Defined Roles & Responsibilities**

Participants suggested the 2020 Census risk management process more clearly defined in one single source roles and responsibilities for all users of the process. They also suggested governance is documented, is in place before the start of activities, works well, and empowers people. 2020 Census Planning should consider appointing an executive –level risk champion

*“Possibly form a risk management staff that would support and perform risk management activities across all teams. This branch would have the training and dedication to risk to provide consistent and integrated support of risks across teams.”*

*“Clarify in the governance process who the Risk Owner is for every risk, that is who manages the risk across the divisions.”*

*“Develop a governance process for Risk Management with Roles, Responsibilities (i.e. Identify a resource to troll the risk register to do a reality check), Priorities, Criteria (definition that people understand on 'program' vs. 'project' risk) defined, Training Program and how far down in a program a risk gets defined. Establish the boards, how often they meet, etc...”*

*“Next time formally identify the risk champion.”*

## **7.3 Improved Communication and Training**

Most participants who performed project risk management duties were not aware that there were program risks. Generally speaking, users of the 2010 Census process wanted all of the tools they need to implement the process to be clearly and succinctly written, and made available from a single location (e.g., a web page).

*“They also wanted easy access to the program and project status reports and they wanted to be invited to the monthly program risk review meeting.”*

*“Put all of the risk management tools in place at the beginning.”*

*“Provide feedback to project managers as to what was done with their risk management reporting.”*

*“Send out a Risk Register report like the "Alert" report that came out. Advertise more heavily what is on eCenoc.”*

*“Make sure that Program Level risks that are linked to Project Level risks get communicated to PMs.”*



*“Have quarterly risk management meetings and focus on operations important at the time. Keep it simple!”*

#### **7.4 Focus on Integration as Compared with Linking Program and Project risks**

2010 Census risks were managed separately at the program and project levels. There was little interaction between the risk management efforts of the team and the program risk management efforts. Project risks were linked to program risks in an exercise. There was not much work done beyond that to integrate risks.

While participants may not have stated explicitly and often how to improve managing project and program risks, they did report often that the linkage was not very useful. They also reported that the project risk managers did not know the status of program risks. It is a natural extension of the preceding recommendations to attempt to integrate them as the program risks umbrella the project risks because the program is divided into projects to ultimately achieve the 2010 Census goals.

A superficial linkage will not improve the 2020 Census risk management process. Identifying shared risks and providing clear instructions on who and how to manage is also an integration step. Teams would be managing fewer risks more efficiently. Integration allows Risk Owners to leverage and share mitigation and contingency efforts therefore, reducing the likelihood that multiple teams are duplicating efforts. Projects should also participate in the regular review of program risks.

*“Foster more integration between project-to-project risks.”*

*“Make sure that Program Level risks that are linked to Project Level risks get communicated to PMs.”*

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## Appendix A: Mitigation Statusing Template

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Mitigation Statusing Template

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Section A: General Information	
Risk Number: <i>DLG</i>	Date:
Risk Name:	Risk Manager:

Section B: Mitigation Plan Status	
Mitigation Plan Status:	Green, Yellow, Red
If Yellow then provide justification why it is not Red:	

Section C: Status of Mitigation Activities				
Item	Number of Mitigation Actions	This Month	Last Month	Cumulative
1	Total			
2	Completed Successfully			
3	On Track			
4	Not on Track			
5	Completed Unsuccessfully or Failed			

Section D: Changes to the Program/Environment that Affect the Risk		
#	Description	Effect on Risk
1		
2		
3		
4		

Mitigation Statusing- Late Design Change

5		
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Section E: Proposed Modifications to the Mitigation Plan							
#	Action <sup>1</sup>	Mitigation Strategy	Mitigation Activity	Why is the Change Proposed?	Owner	Dates	
						Start	Finish
1							
2							
3							
4							
5							

Section F: Mitigation Activities that are "Not on Track"				
#	Mitigation Strategy	Mitigation Activity	Problem/Issue	Proposed resolution
1				
2				
3				
4				
5				

<sup>1</sup> The values for the action is as follows: (1) Add Mitigation Strategy, (2) Delete Mitigation Strategy along with all activities, (3) Modify Mitigation Strategy by adding activities, (4) Modify Mitigation Strategy by deleting activities or (5) Modify Mitigation Strategy by modifying activities

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Mitigation Statusing - Late Design Change

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Section G: Changes to the Probability and Impact Ratings

Factor		Rating		New Justification	RRB Final Assessment
		Current	New		
Probability					
Impacts	Cost				
	Schedule				
	Technical				
	Meeting Stakeholder Expectations				

## Appendix B: The Framework Title

### Topics for Discussion at the 2010 Census Risk Management Process Lessons Learned Focus Group

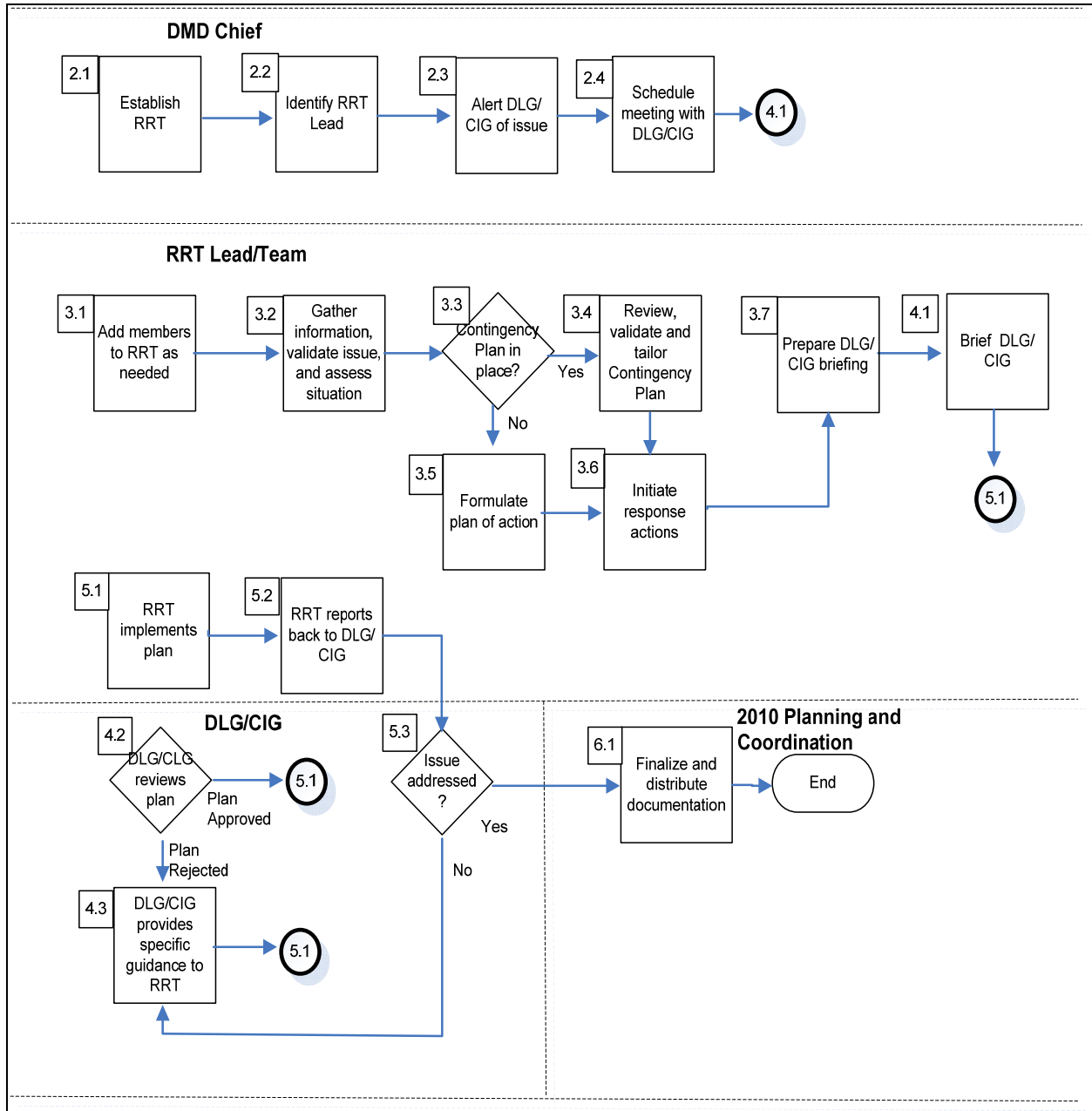
If you have anything particular to say about the underlined items, please be sure to bring that up!

CATEGORY	DEFINITION	THINGS TO THINK ABOUT: <ul style="list-style-type: none"> <li>• WHAT WENT WELL</li> <li>• WHAT DIDN'T WORK WELL</li> </ul>
1. Roles and Responsibilities	Who was responsible for what in the risk management process end-to-end.	Did you understand what your role and responsibilities were in the process? <u>Did you wish mentoring had been available all the time?</u>
2. Distinguishing Project and Program Risks	Interaction between program risk and project risks- Elevating project risks to program risks. De-elevating back to project risk.	Did the process of managing project risks vs. program risks make your job easier? <u>Did "linking" them help you?</u>
3. Risk Analysis	Drafting initial risk register and determining initial risk ratings- Getting to an established set of risks to manage, and initial risk ratings.	Did the process of analyzing risks help or hinder you to manage your project goals or program goals? <u>Is a standard scale useful for both Program and Project risks? Is the 5x5 matrix useful?</u>
4. Mitigation Planning	Getting mitigation plans into place – How did you develop mitigation plans	Did the process of mitigation planning help or hinder you to achieve your project goals? Program goals? <u>Did you want to see these?</u>
5. Contingency Planning	Getting contingency plans into place – How did you develop contingency plans	Did the process of contingency planning help or hinder you achieve your project goals? Program goals? <u>Did you want to see these?</u>
6. Status Reporting	Statusing risks –Regularly assessing the risk register which includes, the risks, the ratings and the mitigation and contingency efforts, reporting on when a risk became an issue	Did the process of Statusing your risks help or hinder managing your project risks? Program risks?



## Appendix C: Rapid Response Process

The Rapid Response Team Process is used to address significant issues that must be addressed quickly.



**Goal of the Rapid Response Team (RRT) Process:** Establish a simple, repeatable methodology for quickly and successfully addressing significant issues that have the potential to impact the success of the 2010 Decennial Census without adding burden that hinders or delays taking immediate action.

**Step 1: A significant issue affecting the success of the Decennial Census is identified**

The existence of an issue requiring immediate action may be identified by anyone and is communicated to the appropriate level of management, and eventually to the Decennial Management Division (DMD) Chief, as quickly as possible. The DMD Chief will communicate this information to the Decennial Leadership Group (DLG)/Census Integration Group (CIG) as soon as practical.

Either of these situations indicates that such an issue has surfaced:

- A risk event occurs for a program-level risk (defined in the Decennial Risk Register) with a defined contingency trigger for the issue, regardless of whether or not a contingency plan exists.
- The issue that arises is not defined as a contingency trigger (it is an unexpected/unplanned issue) **AND** the issue threatens one or more of the following:
  - Success of an operation,
  - Major schedule milestone for the Decennial,
  - Response rate,
  - Commitments to oversight,
  - Quality of the data,
  - Public perception of the Census Bureau.

**Step 2: A Rapid Response Team is established**

For issues with approved contingency plans that include RRT actions, the Risk Manager establishes the RRT in accordance with the documented plan. The Risk Manager is expected to identify which divisions would most likely need to be on the RRT before the issue occurs. This list may need to be updated depending on the issue.

For all other issues that meet the Step 1 criteria, the DMD Chief establishes a RRT, which has the responsibility for defining the plan of action for addressing the issue. Validating that issue meets the criteria defined in Step 1 is the responsibility of the RRT. In this case, the DMD Chief:

- Identifies the RRT lead (generally from the division, operation or system with greatest responsibility for resolving the issue).
- Identifies additional RRT members with input from other Division Chiefs who have a stake in the resolution of the issues.

The DMD chief determines when a meeting with DLG/CIG to review the plan of action should occur. The RRT lead schedules the meeting with the DLG/CIG. The date and time for this review is determined with input from the Risk Manager, the RRT lead, and/or DLG/CIG to the extent feasible. For critical issues during periods of peak activity, this meeting could be required in 24 hours or less.

### **Step 3: The RRT defines the plan of action**

The RRT prepares a plan of action or several options for resolving the issue and, if warranted, begins to take action to address the issue prior to updating DLG/CIG. If the RRT provides multiple options for resolving the issue, the DLG/CIG is expected to make the decision as to which option to implement.

- Additional RRT members may be added at the discretion of the RRT lead.
- The RRT gathers any information necessary for validating the issue, assessing the situation, and preparing an effective plan of action for addressing the specific issue.
- If a useful Contingency Plan exists, the RRT reviews, validates, and tailors the plan for the specifics of the realized issue or prepares alternative plans for a DLG/CIG decision, if necessary.
- If no useful Contingency Plan exists, the RRT formulates a plan of action for the specifics of the realized issue.
- The RRT shall address each of the following questions in preparing a briefing to inform the DLG/CIG about the issue and the status of the contingency planning effort:
  - What is the issue being addressed?
  - What responses to this issue have been taken already and what effect have they had?
  - What are the projected impacts to the Decennial Census as a result of the Issue? For example: schedule, cost, quality, response rates, other?
  - What are the oversight reactions and/or the expected oversight reactions and how will they be communicated to oversight?
  - What are the public's reactions and/or the expected public's reactions?
  - What is the recommended plan for addressing this issue and what are the pros and cons associated with it?
  - What alternative plans were considered? What are they and what are the pros and cons for each?
  - Were there any options initially considered but rejected, and why?
  - Who will have responsibility for each component of the plan of action?
  - What are the impacts of this action plan on other systems or operations? Key Decennial dates? Resources? Other?
  - How will information be communicated to internal and external stakeholders?
  - Is there any additional information that the team believes the DLG/CIG should have to be fully informed?
- The RRT Lead initiates response actions as appropriate through the established organizational chain of command, without DLG/CIG approval.

### **Step 4: The RRT briefs the combined DLG/ CIG**

- The briefing is given by the RRT Lead with all RRT members in attendance.
- The briefing is as factual as possible and answers all of the questions identified in Step 3.
- Because it may be difficult to assemble a team, get all the information needed, analyze the information and formulate a workable plan within the time allotted, it may only be possible for the team to present a partial or draft plan. In this case, a

second briefing to present the final plan will be given to the combined DLG/CIG on a schedule they determine.

- The DLG/CIG may approve the plan (as is or with revisions) or they may reject the plan. In the latter case, it is imperative that the DLG/CIG provide specific direction on how the issue is to be addressed at the same time.

#### **Step 5: Implement the plan and report status back to the DLG/CIG**

The implementation status for the plan of action must be reported to the DLG/CIG on a regular schedule they determine until such time the DLG/CIG determines the issue has been fully addressed. The plan shall be implemented as approved, although if necessary, changes can be made without prior DLG/CIG approval, but must be reported to the DLG/CIG as soon as practical for comment.

#### **Step 6: Finalize the Documentation**

The DMD 2010 Planning and Coordination staff will be responsible for documenting the decisions made during the Rapid Response Team Process. The minimum documentation to be collected is:

- The plan of action briefed to the DLG/CIG, including options/alternatives and any revisions to the plan of action (refer to Step 4).
- Notes captured by the DMD 2010 Planning and Coordination staff during briefings to the DLG/CIG (refer to Step 4).
- Status information on the progress of the contingency plan of action (refer to Step 5).

The RRT Lead provides required information to the 2010 Planning and Coordination staff to finalize documentation. The RRT Lead helps 2010 Planning and Coordination staff review and approve all final documentation.

## **Appendix D: Full List of Lessons Learned Questions in the Study Plan**

### Topics for Discussion: Interview with former Assistant Associate Director for Decennial Census

1. What worked?
2. What didn't work?
3. What would you change for the 2020 Census risk management process?

### Topics for Discussion with the Risk Review Board

1. How could we improve the statusing template?
2. How could we improve the effectiveness of the statusing meetings?
3. How could we make mitigation planning more effective?
4. How do we make contingency planning more effective?
5. How could we improve on the communication from 2010 planning?
6. How would you improve the effectiveness of the RRB?
7. How would you suggest we expedite the process of putting plans into plans?
8. How could we improve the rating scales?
9. Was the risk register an effective tool for describing the risks? How can it be improved?
10. Was the Monthly Status Report (MSR) slide with the risk cube an effective way of communicating the status of the risks? How could we improve this?
11. Were all of the risks that should have been identified and managed done so?
12. How would you design a risk management program that better integrates the project and program risks?

### Topics for Discussion with the Program Risk Managers

1. How helpful was risk management for managing your operations and or programs?
2. Did you have the tools you needed to effectively manage risks? Why/why not?
3. How could we improve the statusing template?
4. Was the statusing template easy to understand? If not, why?
5. Was the statusing template easy to use? If not why?
6. How could we improve the effectiveness of the statusing meetings?
7. How could we make mitigation planning more effective?
8. Was the mitigation template easy to use? If not why?
9. Was the mitigation template easy to understand? If not, why?
10. How could we improve the mitigation template?
11. How do we make contingency planning more effective?
12. How could we improve the contingency template?
13. Was the contingency plan template easy to use? If not why?
14. Was the contingency plan template easy to understand? If not, why?
15. How could we improve on the communication from 2010 planning?
16. How would you improve the effectiveness of the RRB?

17. How would you suggest we expedite the process of putting plans into place?
18. How could we improve the rating scales?
19. Was the risk register an effective tool for describing the risks? How can it be improved?
20. Was the MSR slide with the risk cube an effective way of communicating the status of the risks? How could we improve on this?
21. If you received coaching, how useful was it?
22. How could we make coaching more helpful?
23. How useful was the linking of project risks to your program risks?
24. How would you design a risk management program that better integrates the project and program risks?

#### Topics for Discussion with the Project Risk Managers

1. Did you feel connected to program level risk management efforts?
2. How did the process your team followed to manage risks differ from the process described in the risk management plan?
3. Did you have any interaction with other project or program risk managers to help manage your risks?
4. How helpful was risk management for managing your operations and or programs?
5. Did you have the tools you needed to effectively manage risks? Why/why not?
6. How could we improve the communication from 2010 planning?
7. Was the risk register an effective tool for describing the risks? How can it be improved?
8. If you received coaching, how useful was it?
9. How could we make coaching more helpful?
10. How useful was the linking of your project risks to the program risks?
11. How would you design a risk management program that better integrates the project and program risks?

#### Topics for Discussion with the Risk Process Manager and Staff

1. How could we improve the statusing template?
2. How could we improve the mitigation and contingency plan templates?
3. How could we improve the effectiveness of the statusing meetings?
4. How could we make mitigation planning more effective and more timely?
5. How do we make contingency planning more effective and more timely?
6. How could we improve on the communication from 2010 planning?
7. How would you suggest we expedite the process of putting plans into place?
8. Was the risk register an effective tool for describing the risks? How can it be improved?
9. What was most helpful? How would you design a risk management program that better integrates the project and program risks?