

2020 Census-Decennial Census Programs, Operations and Schedule Management

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2020 Census-Schedule Management Process

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2020 Census: Schedule Management Update

Agenda

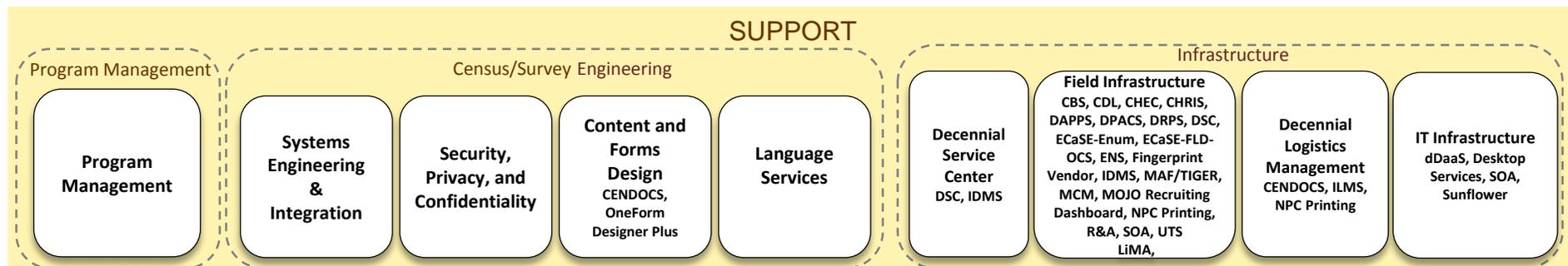
- Complexity of the 2020 Census
- Introduction of the Integrated Master Schedule (IMS)
- Schedule Management Roles and Responsibilities
- Schedule Management Process
- Schedule Management Reports
- Update on the IMS Status
- Questions

2020 Census: Schedule Management Update

Complexity of the 2020 Census

- It is a program consisting of multiple projects that rely on facilities, people, materials, systems, data, procedures, and contracts
- Large transactional system that
 - Integrates 35 operations
 - Utilizes 52 systems released at different points in time
 - Large volume
 - Spans multiple years
 - Unforgivable deadlines (March 31, 2017 & 2018; December 31, 2020; and March 31, 2021)
 - High level of activity during a short period of time (peak operations)

With the goal to count everyone once, only once, and in the right place



FRAME

- Geographic Programs**
ATAC, GUPS, MAF/TIGER, SOA, WebTQA
- Local Update of Census Addresses**
CDL, Centurion, GUPS, MAF/TIGER, NPC, PEARISIS, SOA, UTS
- Address Canvassing**
BARCA, CBS, CDL, CFS Hotline, Desktop Services, DSC, DSSD, ECaSE-FLD-OCS, ECaSE-OCS, Geospatial Services, IDMS, ILMS, LiMA, MAF/TIGER, MCM, MOJO – Optimizer/Modeling, SMARCS, SOA, UTS

- Forms Printing and Distribution**
Commercial Printing, CDL, ECaSE-OCS, IPTS, NPC Printing, UTS
- Paper Data Capture**
ATAC, CaRDS, CDL, CIRA, DRPS, ECaSE-OCS, iCADE, IPTS, NPC, SOA, UTS
- Integrated Partnership & Communications**
2020 Website, CDL, CEM, CQA, CRM, DAPPS, DMP, ILMS, NFC, R&A, SOA, UTS
- Internet Self-Response**
CDL, CQA, CaRDS, DRPS, ECaSE-ISR, ECaSE-OCS, Fraud Detection System, MaCS, MAF/TIGER, PEARISIS, RTNP, SOA, UTS
- Non-ID Processing**
CDL, CQA, DRPS, ECaSE-ISR, ECaSE-OCS, Fraud Detection System, MaCS, MAF/TIGER, PEARISIS, RTNP, SOA, UTS

RESPONSE DATA

- Update Enumerate**
CDL, Centurion, CFS Hotline, Desktop Services, DSC, ECaSE-Enum, ECaSE-FLD-OCS, ECaSE-OCS, GUPS, ILMS, MAF/TIGER, NPC Printing, SOA, UTS
- Group Quarters**
2020 Website, CaRDS, CES, CDL, Centurion, CES, CFS Hotline, Desktop Services, dDaaS, DSC, ECaSE-Enum, ECaSE-FLD-OCS, ECaSE-OCS, ENS, LiMA, MAF/TIGER, MOJO Optimizer/Modeling, NPC, PEARISIS, R&A, SMARCS, SOA, UTS
- Enumeration at Transitory Locations**
CaRDS, CDL, CFS Hotline, CQA, DSC, Desktop Services, ECaSE-Enum, ECaSE-FLD-OCS, ECaSE-OCS, Geospatial Services, LiMA, MAF/TIGER, R&A, SMARCS, SOA, UTS
- Census Questionnaire Assistance**
CDL, CHEC, CQA, ECaSE-ISR, ECaSE-OCS, SOA, UTS

- Nonresponse Followup**
CAES, CDL, CFS Hotline, CQA, Desktop Services, DSC, ECaSE-Enum, ECaSE-FLD-OCS, ECaSE-OCS, Fraud Detection System, Geospatial Services, MOJO – Optimizer/Modeling, PEARISIS, SMARCS, SOA, UTS
- Response Processing**
CAES, CaRDS, CDL, CQA, DAPPS, DRPS, DSSD, ECaSE-Enum, ECaSE-FLD-OCS, ECaSE-OCS, CES, Fraud Detection System, LiMa, MaCS, MAF/TIGER, PEARISIS, POP, SMARCS, SOA, Tabulation, UTS
- Federally Affiliated Americans Count Overseas**
Centurion, DRPS
- Update Leave**
CDL, CFS Hotline, CQA, Desktop Services, DSC, ECaSE-FLD-OCS, ECaSE-ISR, ECaSE-OCS, Geospatial Services, IDMS, ILMS, LiMA, MAF/TIGER, MCM, MOJO – Optimizer/Modeling, R&A, SOA, SMARCS, UTS

PUBLISH DATA

- Data Processing and Dissemination**
2020 Website, CDL, CEDSCI, DRPS, IDMS, MAF/TIGER, SOA, Tabulation, UTS
- Redistricting Data Program**
2020 Website, CEDSCI, Centurion, GUPS, MAF/TIGER, SOA, Tabulation
- Count Review**
Centurion, DRPS, ECaSE-OCS, SOA, UTS
- Count Question Resolution**
MAF/TIGER, SOA
- Archiving**
CIRA, DRPS, iCADE, UTS

OTHER CENSUSES

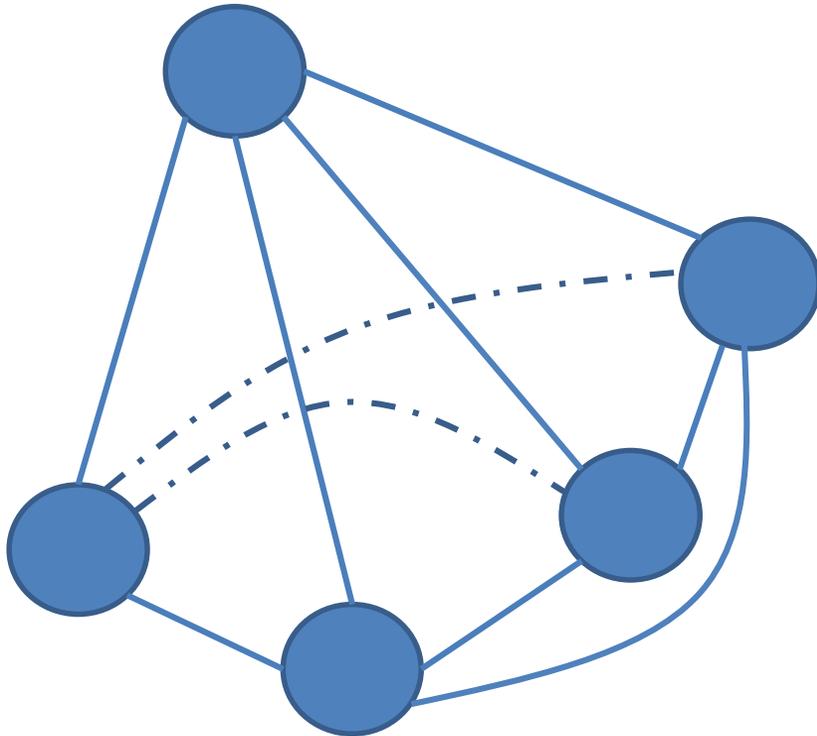
- Island Areas Censuses**
2020 Website, ATAC, CDL, CHEC, Commercial Printing, CQA, Desktop Services, DPACS, DSC, ECaSE-OCS, Fingerprint Vendor, Geospatial Service, GUPS, iCADE, LiMA, MAF/TIGER, NPC Printing, R&A, SOA, UTS

TEST AND EVALUATION

- Coverage Measurement Design & Estimation**
CaRDS, DRPS, DSSD, MAF/TIGER, PEARISIS, PES Clerical Match and Map Update, PES Imputation and Estimation, PES PCS, SOA, UTS
- Coverage Measurement Matching**
DSSD, ECaSE-OCS, Geospatial Services, iCADE, MAF/TIGER, PEARISIS, PES Clerical Match and Map Update, PES Imputation and Estimation, PES PCS, SOA, UTS
- Coverage Measurement Field Operations**
CDL, DAPPS, ECaSE-Enum, ECaSE-FLD-OCS, ECaSE-OCS, LiMA, MAF/TIGER, MCM, NPC, PES PCS, SMARCS, SOA, UTS,
- Evaluations and Experiments**
2020 Website, CES, POP

2020 Census: Schedule Management Update

Complexity of the 2020 Census



Example:

In a five-operation program, there are a maximum of 10 integration points

$$(5 \times 4) / 2 = 10$$

2020 Census:

In a 35-operation program with 52 supporting systems, there are a maximum of 3,741 integration points

$$(87 \times 86) / 2 = 3,741$$

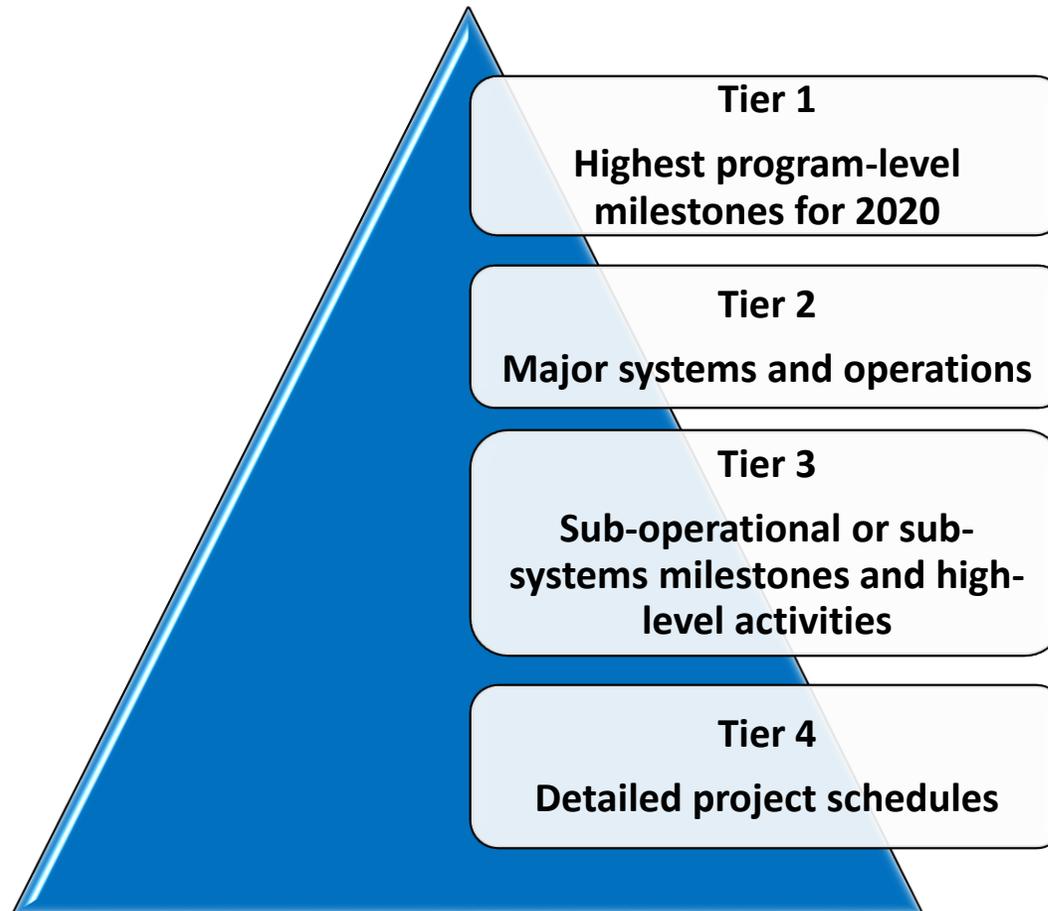
2020 Census: Schedule Management Update

What is the Integrated Master Schedule (IMS)?

- The IMS is a complex, detailed, interdependent program schedule consisting of:
 - 87 projects
 - 24,664 activities
 - 47,155 relationships
- It is multi-tiered to support integration of all projects within and across the Decennial program and allows for control at the program and project levels
- Schedule management tool is Oracle Primavera

2020 Census: Schedule Management Update

What is the Integrated Master Schedule (IMS) Structure



2020 Census: Schedule Management Update

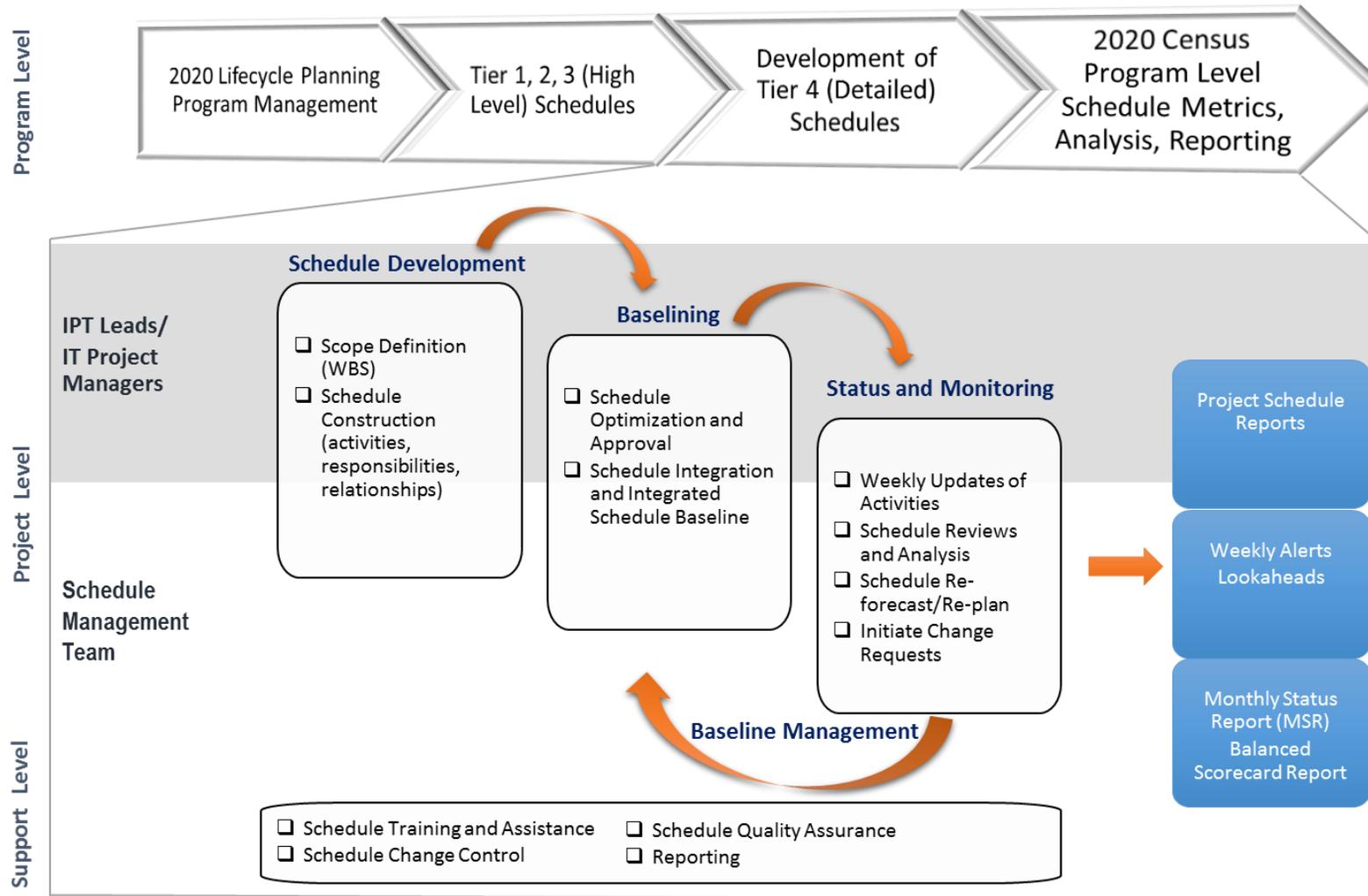
Schedule Management Roles and Responsibilities

The Decennial Census Management Division's (DCMD) Scheduling Staff: Responsible for developing, managing, and operating the 2020 Census Schedule System. This includes:

- Oversee the administration of the schedule
- Ensure the schedule design is aligned with the program design
- Facilitate the development of operation and system schedules
- Ensure project schedules adhere to best practices and standards, as defined in the Schedule Management Plan
- Leverage Government Accountability Office (GAO) Best Practices
- Ensure the schedule is in alignment with the Defense Contract Management Agency (DCMA) 14-point assessment
- Create and maintain the schedule baseline
- Implement changes to the baseline through the program change management process
- Identify schedule variance
- Work with program managers to resolve issues
- Produce standard and adhoc schedule reports
- Conduct periodic assessments of the schedule, e.g., schedule risk analysis
- Report program status to Census Bureau leadership

2020 Census: Schedule Management Update

Schedule Management Process



2020 Census: Schedule Management Update

Schedule Management Process

GAO Best Practices

- 100% scope identified and included in IMS
- All activities are logically linked
- All activities have accurate and reasonable duration
- IMS can be traced horizontally and vertically
- Critical path can be extracted and validated
- Total float is within tolerance
- Schedule Risk Analysis is conducted regularly
- Actual progress is applied weekly
- Baseline is maintained and archived

2020 Census: Schedule Management Update

Schedule Management Process

Defense Contract Management Agency (DCMA) 14 Point Assessment

- Purpose: Used as a tool to ensure quality schedules are created and maintained
- Expectation: All Decennial schedules should meet the DCMA 14 Point Assessment threshold values
 - Schedule Management Staff use this assessment as part of their quality checks
 - If a schedule falls outside a threshold, they work with the schedule owners to take corrective actions that bring the schedule back into alignment
 - Informs the schedule development and statusing guidelines

2020 Census: Schedule Management Update

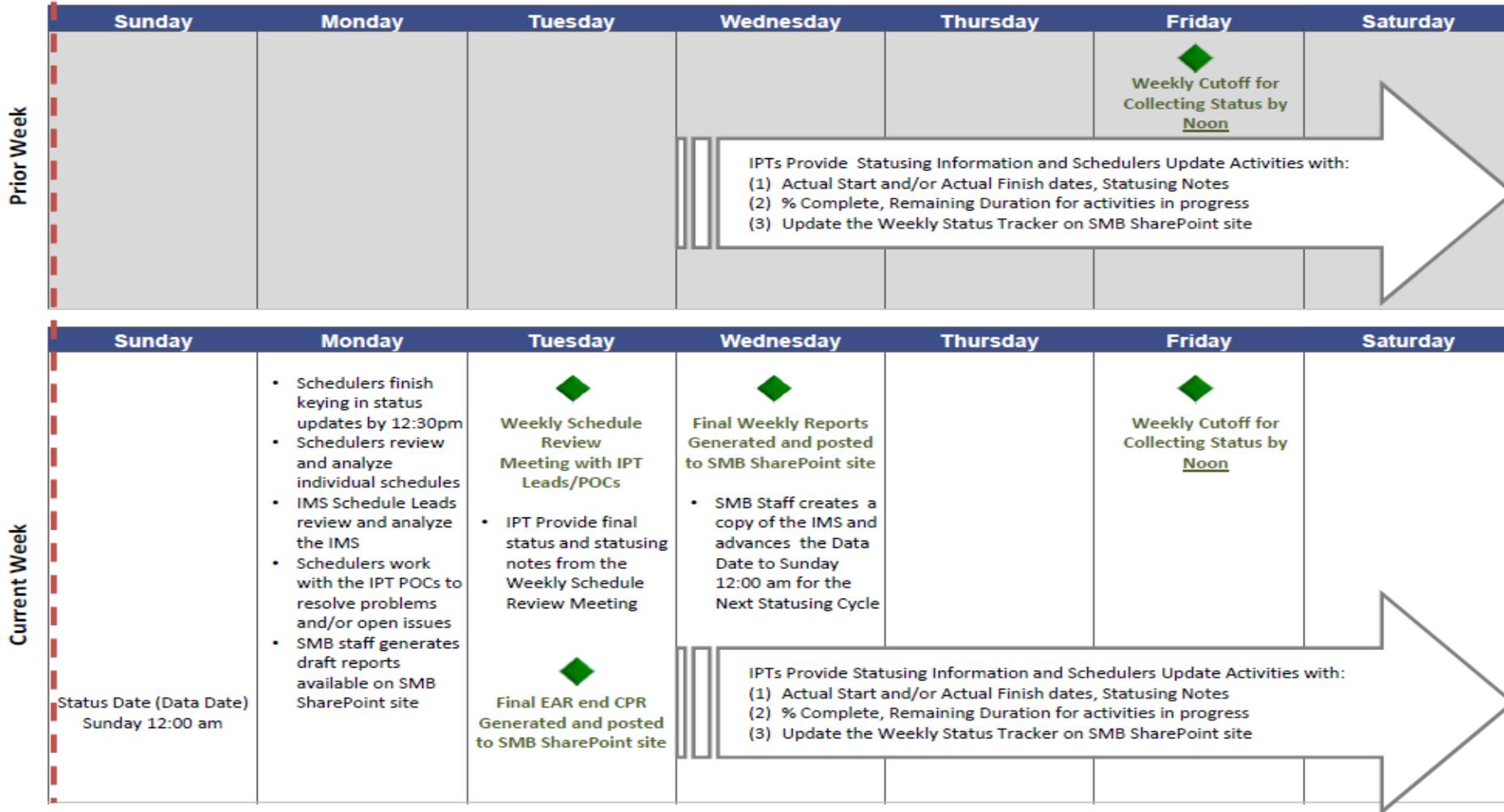
Schedule Management Roles and Responsibilities

- DCMD Management: Facilitate coordination and integration among the schedule stakeholders and ensure cooperation with the schedule management process.
- Portfolio Management Governance Board (PMGB): Team consisting of representatives from the Decennial Directorate Leadership Team and supporting area assistant directors and division chiefs, responsible for reviewing and approving 2020 Census projects deliverables.
- **Project Managers**: Responsible for participating in the schedule development and management process and using the schedules to manage their work. This includes:
 - Development and review of their schedule
 - Integration of their schedule with other project and system schedules
 - Ownership of their schedule content, e.g. scope, durations, logic, etc.
 - Weekly statusing of their schedule
 - Weekly review of their schedule

* Project Managers are the Integrated Project Team (IPT) Leads or IT Project Managers

2020 Census: Schedule Management Update

Schedule Management Process-Schedule Status Cycle



2020 Census: Schedule Management Update

Schedule Management Process-Statusing Guidelines

| Current Status | Steps |
|-----------------------------------|--|
| Start Milestone Started | ✓ Enter Actual Start date (Start Milestones only have Start date) |
| Finish Milestone Completed | ✓ Enter Actual Finish date (Finish Milestones only have Finish date) |
| Activity Completed | <ul style="list-style-type: none"> ✓ Enter Actual Start date (if activity started since last update) ✓ Enter Actual Finish date (if activity finished since last update) |
| Activity In progress | <ul style="list-style-type: none"> ✓ Enter Actual Start date (if activity started since last update) ✓ Enter/update % Complete (at minimum 25%, 50%, or 75%) ✓ Enter/update Remaining Duration or Expected Finish date ✓ Enter/Update Statusing Notes if activity is delayed to explain reason for delay |
| Activity or Milestone Not started | ✓ If activity/milestone should have started/finished and is delayed then enter/update Statusing Notes to explain reason for delay |

2020 Census: Schedule Management Update

Standard Schedule Reports

- **Should Have Started/Should Have Finished Report** – Status of a list of activities that should have started and/or finished and have not started or finished
- **30, 60 & 90 Day Look Ahead Reports** – Status of a list of activities that should start and/or finish in the next 30, 60, and 90 days
- **Executive Alert Report (EAR)** – Status of a list of activities that represent gates of progress that must start and finish on time in order to deliver the apportionment and redistricting data products

2020 Census: Schedule Management Update

Integrated Master Schedule Development, Integration, and Review

- 2020 Census Execution detailed schedule development: July - December 2017
- Baselined the schedule: December 14, 2017
- Weekly statusing and monitoring of baselined schedule: December 15, 2017
- Working with Operations, Systems, and Testing Project Managers to incorporate the converted systems releases into the baselined IMS: Target finish date is October 31, 2018

2020 Census-Risk Management Process

Deidre Hicks
Decennial Census Management Division



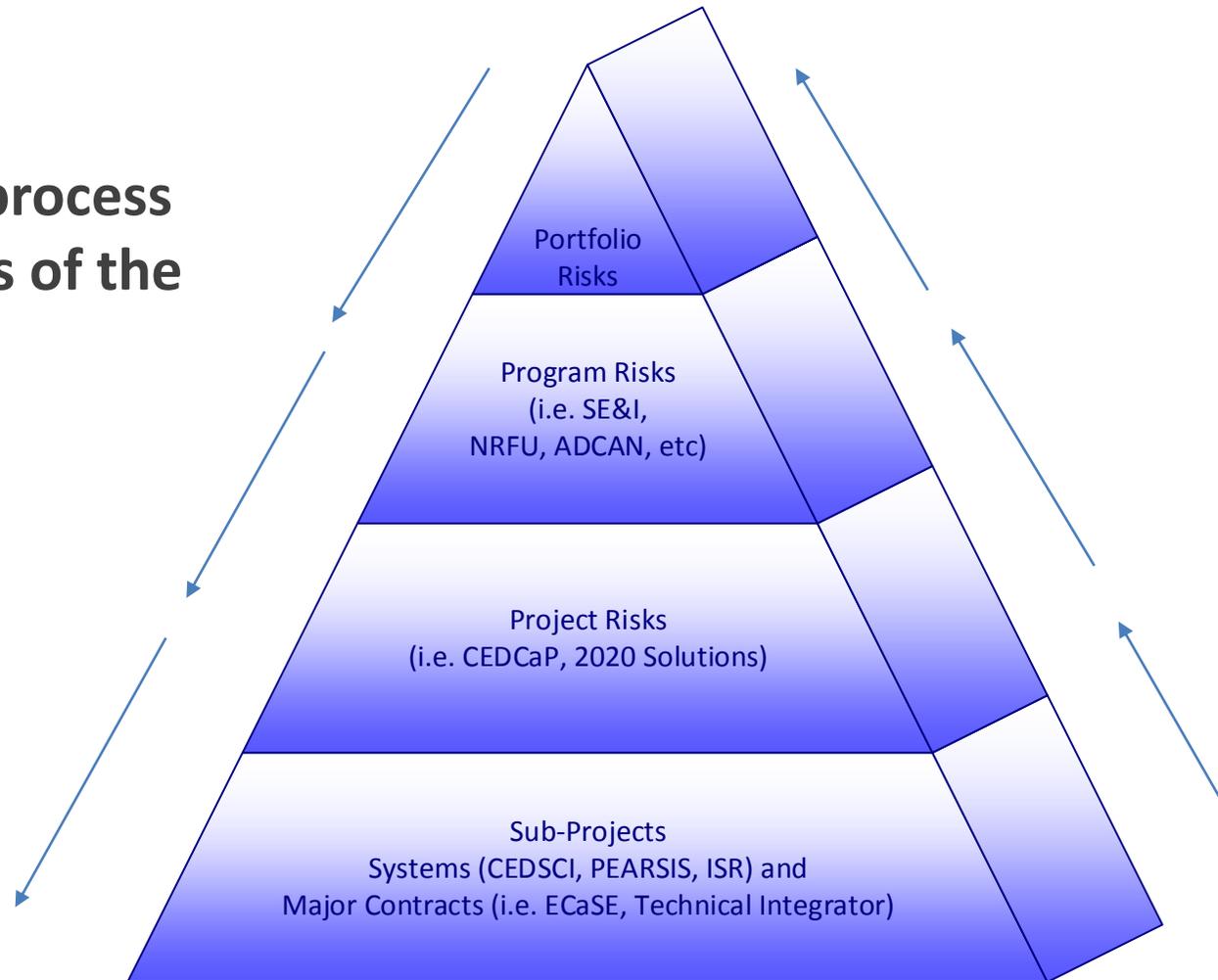
2020 Census: Risk Management Process

Agenda

- Risk Management Structure and Process
- Risk Management Governance and Reporting
- Review of Portfolio Level Red Risks
- Program and Project Level Risk Summary

2020 Census: Risk Management Structure and Process

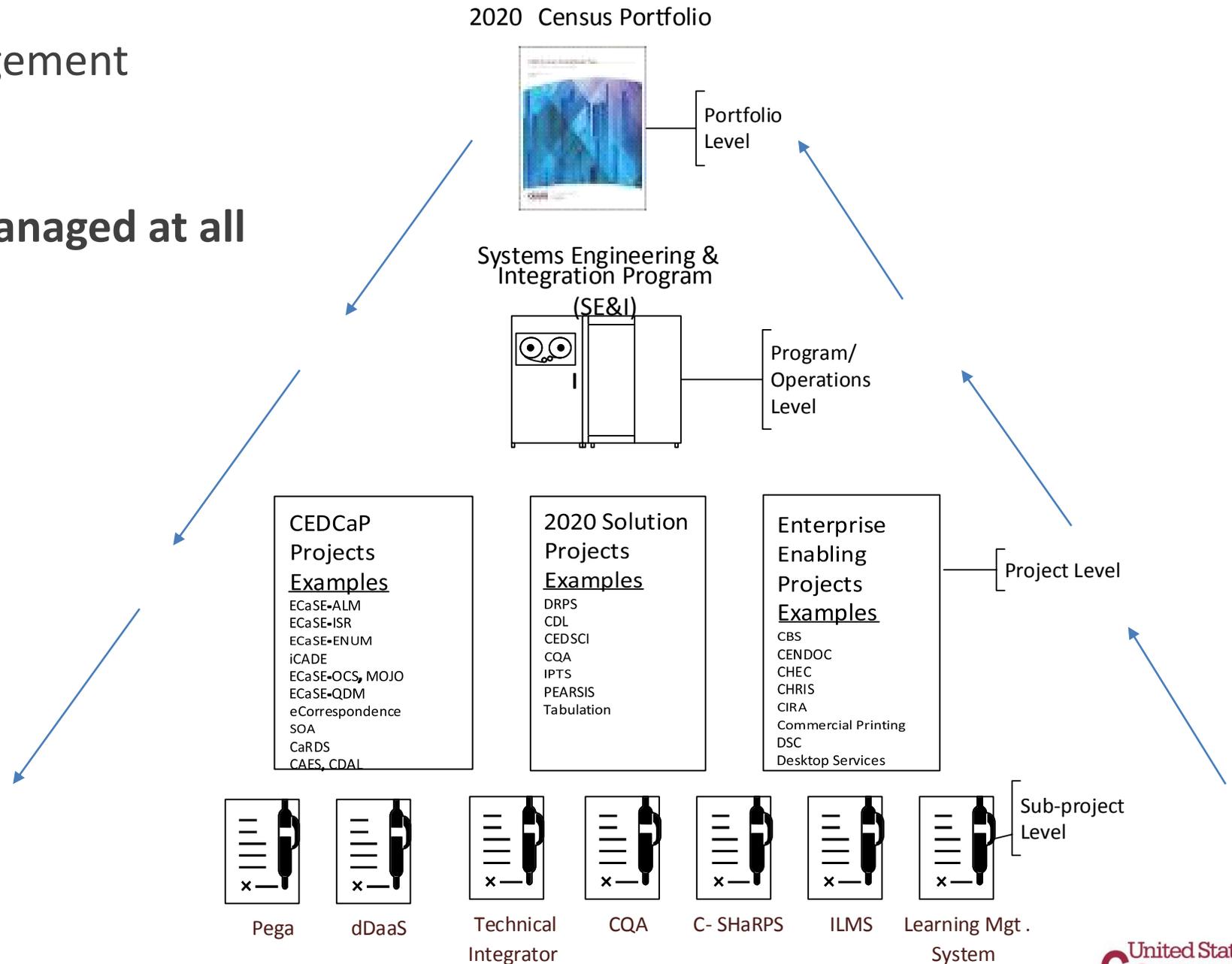
The Risk Management process is conducted at all levels of the 2020 Census Portfolio.



2020 Census Portfolio Risk Management Process

2020 Census: Risk Management Structure and Process

Risks are identified and managed at all levels of the 2020 Census.



2020 Census

Portfolio Management-Structure and Process

Portfolio risks span the 2020 Census life cycle and could jeopardize the ability to achieve 2020 Census goals and objectives.

- Have the potential to be realized more than once during the life cycle.
- Span several years with many potential risk events over that period.
- Risks can spin-off multiple issues.
- May elevate from the program, project and sub-project level because of the potential to impact portfolio goals.

2020 Census

Risk Management-Governance

The 2020 Census Risk Review Board is the overall governing body presiding over the 2020 Census Portfolio, program and project level risks management processes.



2020 Census

Risk Management-Reporting

Dasher Report

- Monthly report to Census Bureau leadership and Commerce Managers including the Associate Director for Decennial Census Programs, Director, Deputy Director, Department of Commerce.
- Top Risks (Red and Yellow), Portfolio Risk Inventory, Mitigation Treatment Plans.

Capital Planning Investment Control (CPIC) Reporting

- Monthly delivery to the Department of Commerce and OMB.
- Portfolio Risk Register, full information on all Red risks, and a Quad Chart with Top Risks.

2020 Portfolio Management Governance Board (PMGB)

- Quarterly review of Red risks. Escalated risks brought to PMGB as necessary.

2020 Census

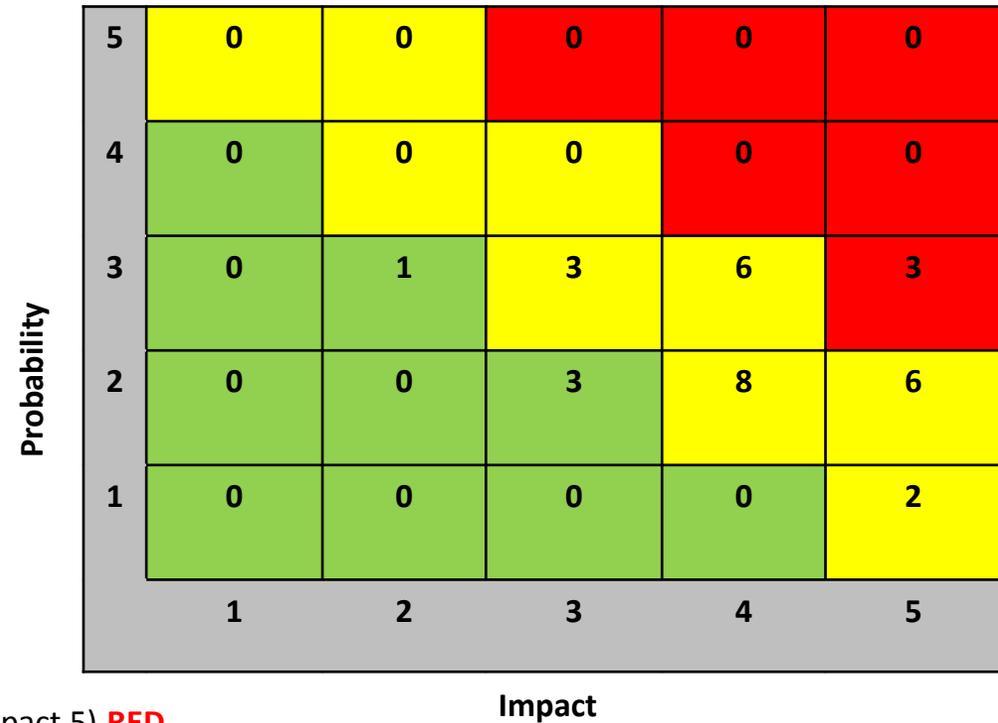
Risk Management-Portfolio Risk Management Rating Scales

| Risk Impact Category | A Risk's Potential to Impact the Portfolio's Ability to: |
|-----------------------------|---|
| Cost | Stay within its overall funding or the funding of an individual major component. |
| Schedule | Achieve major and highly visible schedule milestones, or meet the overall portfolio schedule. |
| Technical | Meet its operational and production performance requirements. |
| Customer Expectations | Meet the expectations of and commitments to customers and stakeholders. |
| Public Trust | Meet the expectations of and requirements for public trust in the Census Bureau or damage the public reputation of the Census Bureau. |

2020 Census

Portfolio Level Top Risks

| Quadrant | Total Risks | % |
|----------|-------------|-------|
| RED | 3 | 9.4% |
| YELLOW | 25 | 78.1% |
| GREEN | 4 | 12.5% |
| TOTAL | 32 | 100% |



- Public Perception of Ability to Safeguard Response Data (Probability 3, Impact 5) **RED**
- Cybersecurity Incidents (Probability 3, Impact 5) **RED**
- Testing of Performance Measurement Reports (Probability 3, Impact 5) **RED**
- Duplicate and Missing Living Quarters <New> **Yellow**
- Within-Household Person Overcoverage and Undercoverage <New> **Yellow**

Data Date: 7/27/18

QUESTIONS?