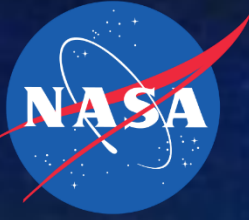


Evolution of the Schedule Competency at Glenn Research Center



2024 NASA Cost and Schedule Symposium
April 2024



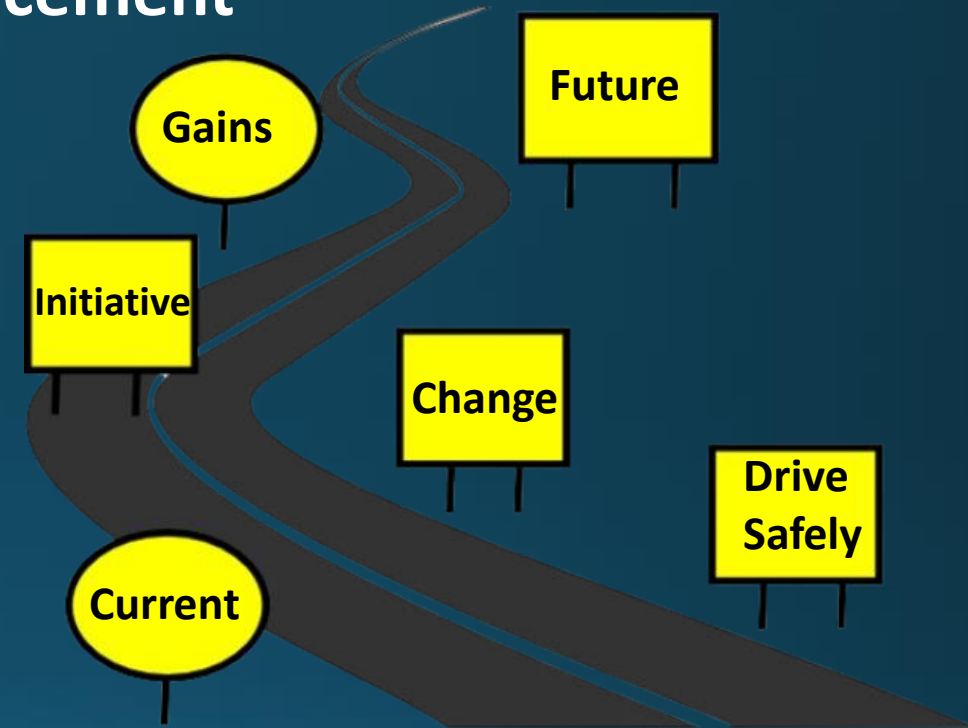
Presenters

(Three Perspectives)

- **Paul McMasters - Scheduling Lead for GRC (OCFO)**
- **Danelle Fogle - Scheduler Team Lead/Supervisor for CPSS Contract at GRC (OCFO)**
- **Jacob Jevic - Chief of Program/Project Integration Office (Space Flight Systems at GRC)**

Road Map

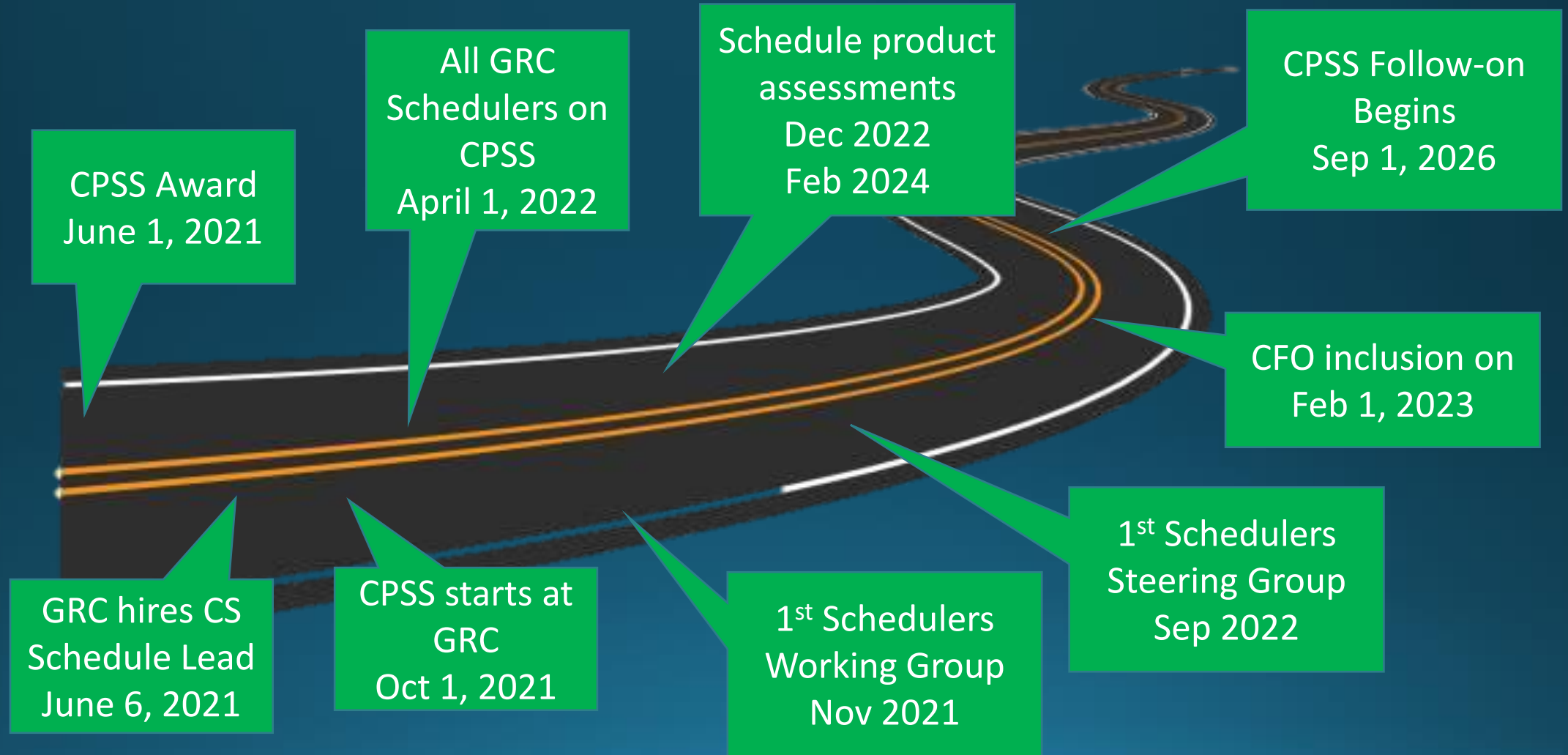
- Drive for GRC Scheduling Competency Enhancement
- Initiatives for Change
 - Implemented Initiatives
 - Current Initiatives
- Gains Made and Future Work



Goal of presentation

- Share scheduling changes, challenges, and lessons learned
- (Hopefully) Share some best practices
- PP&C at NASA is always changing
- We/You are not alone!

Road Well Traveled





**Drive for GRC Scheduling
Competency Enhancement**

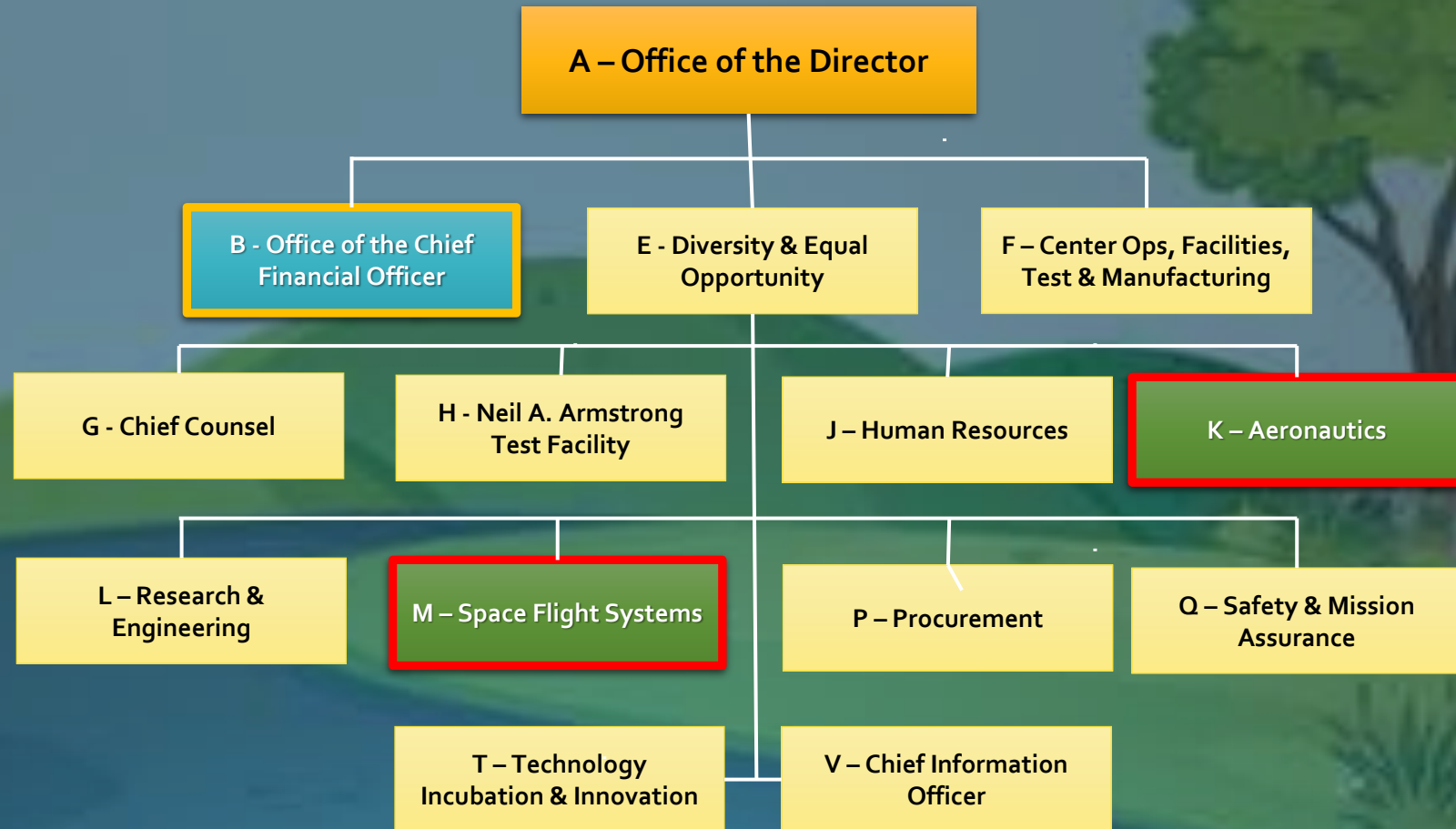
GRC Scenery

GRC Mission:

We drive research, technology, and systems to advance aviation, expand human presence across the solar system, enable exploration of the universe, and improve life on Earth.

Key Project Management Orgs:

- Code K = ARMD content
- Code M = ESDMD, SOMD, SMD, & STMD content
- Project Management is everyone's responsibility!



Events Leading to Scheduling Changes



- **What was the Driving force?**
 - To enhance Scheduling Competency
- **Business Service Assessment (BSA) 4**
 - Agency MSC established OCFO as the Capability Leader for Program Planning and Control policies, processes, and adequacy of workforce skills
 - OCFO has ownership of the policy, processes, and stewardship of the skill/competency as part of CFO steward of PP&C, including Scheduling
- 2020 PP&C Working Group and Schedule Management “Right Sizing” activities, recommended OCFO reorganize Schedulers into OCFO



Implemented initiatives

Obstacles and Barriers

- **Schedulers were ALL contractors**
- **Schedulers were on two (2) different Center contracts**
 - No consistency
 - Training and Development
 - Approach to Managing
- **Schedulers were “badged” to the organization funding them**



- **Lack of "Voice" with Center Management and Scheduling Community**
- **No Civil Servant scheduling competency**
- **OCFO Cost and Economic Analysis Office did not own PP&C**

Scheduling Redirection



1. Hired Civil Servant Scheduler in CFO (June 2021)

- Schedule Lead
 - GRC Consolidated Program Support Services (CPSS) Contracting Officer Representative (COR) and Technical Monitor (TM)
- Provides scheduling competency development, leadership, and policy

2. Transitioned Contractor Schedulers to one contract (Oct 2021/Apr 2022)

- GRC Schedulers transitioned from local contracts to Agency CPSS contract
- CPSS contract managed by OCFO PP&C Office

3. Transitioned Contractor Schedulers from Project orgs to OCFO (Feb 2023)

Implemented

- **Performed schedule product assessment supporting Space Flight Systems Projects**

- Initiated by Space Flight Systems with analysis support from OCFO
- Assessment of current schedule products
- Identified areas that need improvement
- Identified Scheduling successes so far

- **CPSS hosts Monthly Lunch and Learns**

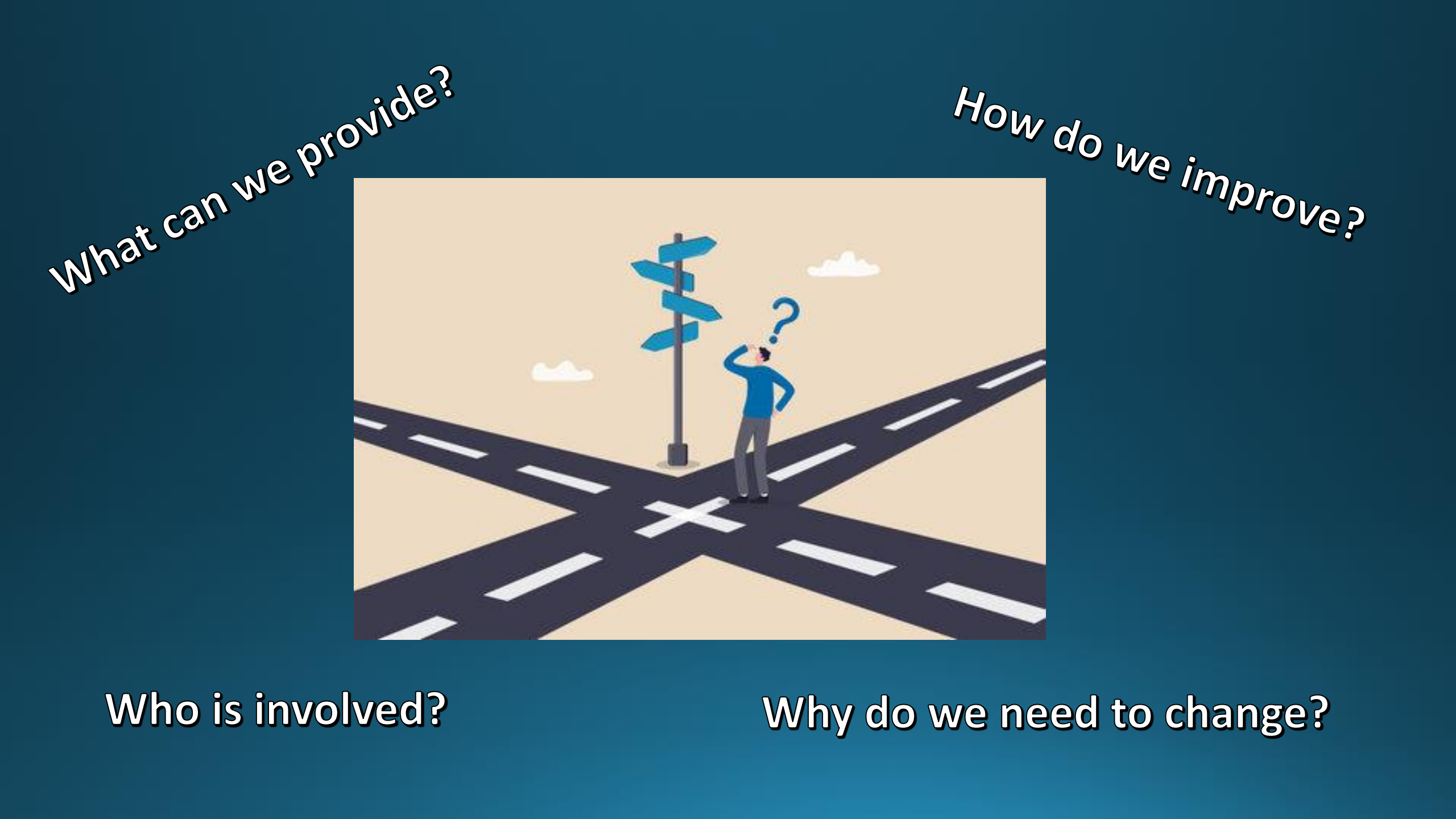
- **Approach to hiring**

- Teach the recruiters what we are looking for and the nature of the job
- Soft skills (can teach someone how to use MS Project & other SW, can't teach someone the soft skills)





Current and future initiatives



What can we provide?

How do we improve?

Who is involved?

Why do we need to change?

GRC Schedule Initiative

GRC Schedule Initiative driven by the GRC Center PP&C Lead



a. The primary goal of this effort is to enhance the quality and consistency of schedule products across the Center.

b. Objectives

a. Consistency

b. Efficiency

c. Knowledge sharing

d. Building on the scheduling teams strengths and building a scheduling voice for the Center

e. Cultural of psychological safety

a. Contribute ideas, thoughts, concepts that will be part of the problem-solving or creative process

c. Accomplishment

a. Established a scheduling working group to foster scheduling best practices, methods, principles, and evaluate current methodologies across center projects.

Activities Pursuing

- **Monthly Schedule Working Group/community of practice**
- **Schedule Steering Committee**
 - Developing metrics
 - Acumen Fuse
- **New way of doing business**
 - Bench Scheduler – sponsored by Space Flight Systems
- **NASA HQ Schedule Community of Practice (SCoPE)**
- **Schedule Assessment with support from the Space Flight Systems Directorate**



GRC Scheduling Working Group

- Establish a Scheduling Working Group (SWG) to foster scheduling best practices, methods, principles, tips/tricks, and evaluate current methodologies across center projects
 - Include all personnel providing the scheduling function or interested in the scheduling competency
 - Consistency in guidance and application of scheduling policy
 - Monthly team meetings
 - Begin to document lessons learned creating a scheduling body of knowledge
 - Document history of completed schedules



GRC Scheduling Steering Committee

Guide the Scheduler Working Group (SWG) to enhance the quality & consistency of scheduling practices & products across the Center to strengthen schedule management.

- **Establish a GRC Scheduling Steering Group**
 - Include scheduling personnel (PP&C or SME) & customers
 - Align advisors to evaluate gaps and deficiencies
 - Critical Thinking and Analysis skills
- **Identify Soft Skills training**
 - Problem-Solving
 - Emotional Intelligence
 - Leadership
 - Strategic Thinking/Analysis
 - Teamwork
 - Communication – Crucial Conversations (SATERN ?)
 - Adaptability
 - Attention to Detail
 - Presentation skills



GRC Scheduling Steering Committee

Project Controls Maturity Assessment

Focus Area
Planning
Scheduling
Baselining
Status Updating (real time & offline)
Reporting (programmatic, project, team) - lack of templates and/or consistency across the projects/Center
Basic consistent scheduling principles and practices
Customer Service
Schedule Analysis (taking initiative to look beyond current state, scenario planning, etc.)
Proper reporting/charts based on audience (i.e., do I need detailed schedule for analysis, a summary of critical path, a rolled up one-pager type schedule for management/strategy discussions, or something else?)



Challenges

Gains Made



Future Work

GRC Advocacy/Support



- **GRC supports and advocates for schedule management**
 - Current Project Management development goal is to focus on risk management and schedule management – lots of synergy with Scheduler development
 - Focus on improved milestone/schedule status/reporting at Center Governance Boards
- **Collaborating and building relationships with other Centers**
- **Additional Future Work:**
 - SFS working with CPSS Lead Scheduler to integrate schedules across organization/ projects
 - Schedulers to help develop Power BI schedule dashboards as part of overall PP&C Dashboard (Cost, schedule, risk)

The Road Forward

- Develop Center-wide program and project execution as a core competency at GRC
- Working dynamic scheduling changes on a Firm Fixed Price contract
 - Constraints
- Pay scale - difficult to bring in scheduler 1 or 2...
- Working to further define roles and responsibilities between NASA and contractor
- Working with other centers to define changes and requirements needed for follow-on contract
- Personnel turnover





Take Aways/Summary

Before	Gains Made (Current)
Schedulers were ALL contractors / No Civil Servant scheduling competency	Two Civil Servant Schedulers leading competency – capability strengthened
Schedulers on two (2) different Center contracts	Contractor Schedulers on one Agency contract
Schedulers “badged” to the organization/project funding them	Schedulers badged to OCFO PP&C Office
No independent audits/assessments of schedule products across the Center	Performing schedule product assessments and promoting the use of independent schedule analysis and schedule risk analysis resources for all schedules
Lack of "Voice" with Center Management and Scheduling Community	Reinvigorated the Scheduling Working Group driving toward consistent training and development of competency
No scheduler development or pipeline	Bench Scheduler supported by Space Flight Systems