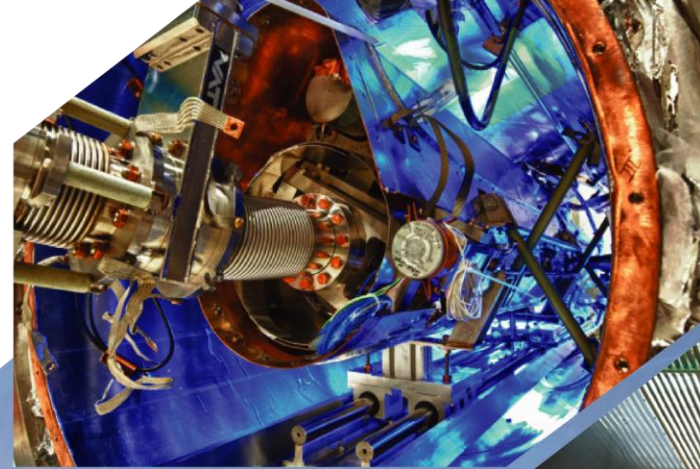


FermiFORWARD

Report from FermiForward Leadership

Jack Anderson
Vice President National Laboratories (interim)
University of Chicago

High Energy Physics Advisory Panel
December 6, 2024
Rockville, MD





FermiForward's Vision: A world-leading, preeminent Science Lab for the future...

- A bold, exciting vision for groundbreaking science, well aligned with the P5 report
- Premier user facilities
- An experienced team to deliver the mission
- Enabled by a renewed campus and safe/efficient operations

Critical Outcomes





FermiForward's Vision: ...enabled by effective and efficient systems, tools and infrastructure

- A bold, exciting vision for groundbreaking science
- Premier user facilities
- An experienced team to deliver the mission
- Enabled by a renewed campus and safe/efficient operations

Critical Outcomes



➤➤➤ Keys to Fermilab's success

- We have an ambitious and expanding S&T program
- We must deliver a \$5.5B portfolio of projects safely, on time, within budget
- We must continue to bring discipline and efficiency to laboratory operations
- These require
 - A leadership team who have demonstrated a trust relationship with the community and DOE
 - Improvements in how we conduct business, with the effective integration of science and operations
 - An enhanced level of management rigor
 - Understanding and communicating what is changing...and why



New partnership brings value and experience

- *FermiForward Discovery Group, LLC*
- Strength in science with two primary partners
 - **University of Chicago**
 - **Universities Research Association**
- Reinforced operations with two integrated subcontractors
 - **Amentum**
 - **Longenecker & Associates**
- Exciting new partnerships with **18 research institutions**





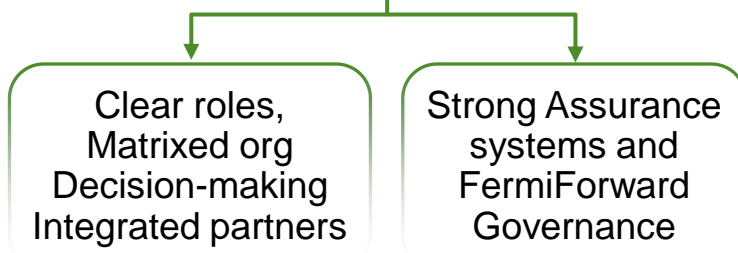
Understanding the landscape

- DOE expectations for mission delivery
- Address needs of users, affiliates and collaborators
- Recognize operations as Mission delivery enabler – *become the solution, not the barrier*
- Establish FermiForward as a trusted partner

A word cloud featuring the following terms: 'safety' (large green), 'trust' (large dark blue), 'engage' (large dark red, oriented vertically), 'accountability' (medium blue, oriented vertically), 'deliver as promised' (green), 'efficiency' (medium blue, oriented vertically), 'innovative problem solvers' (green), and 'culture change' (dark red).

➤➤➤ Achieving ambitious strategic goals

Organizational Structure



Outcome

Clear, effective responsibilities, authorities and decision-making

Fermilab

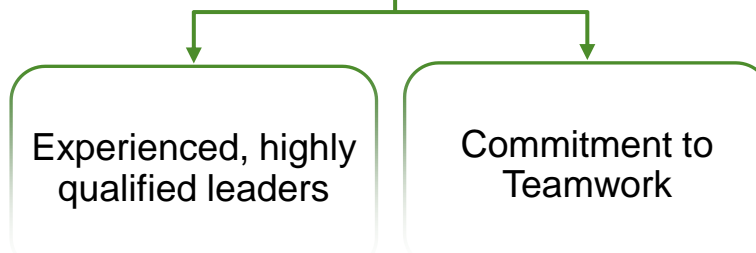
amentum >

LONGENECKER & ASSOCIATES

THE UNIVERSITY OF CHICAGO

URA UNIVERSITIES RESEARCH ASSOCIATION

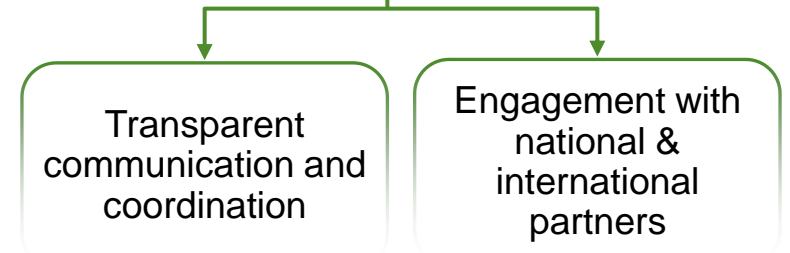
Leadership Team



Outcome

FermiForward leadership team drives excellence in scientific efforts, complex projects and operations

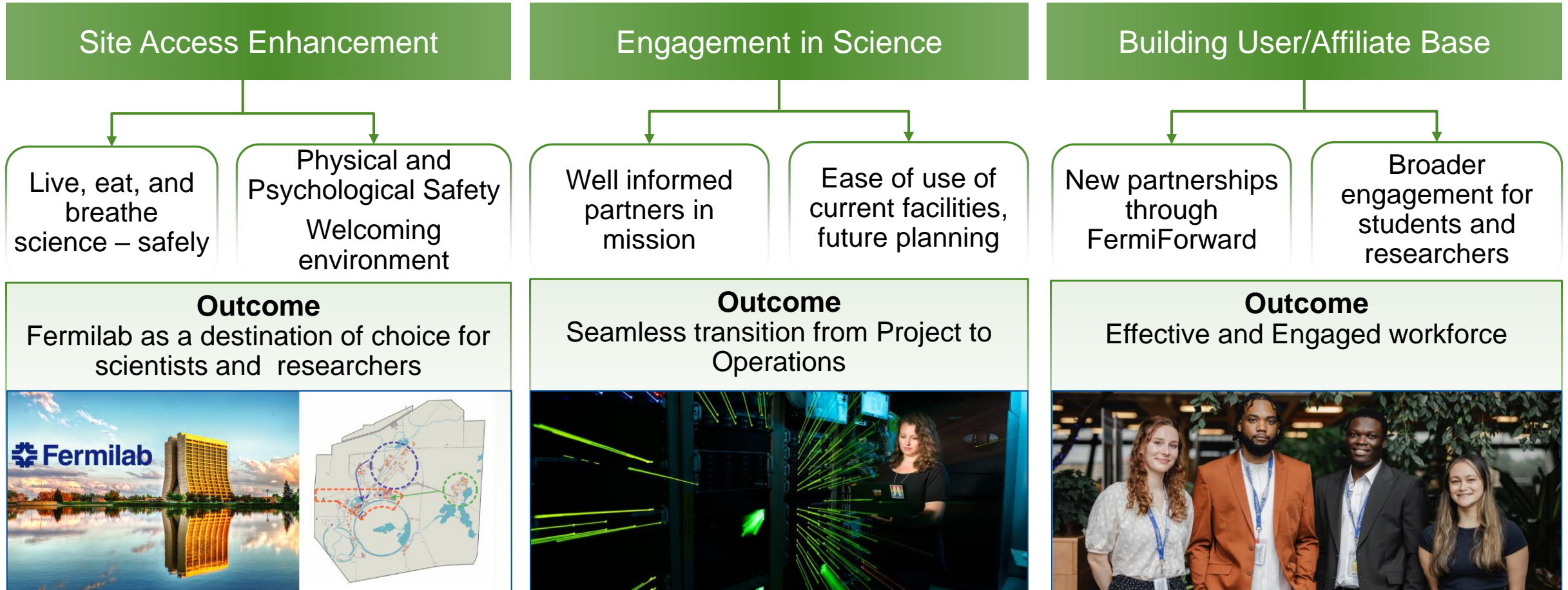
Alignment and Engagement



Outcome

Mission delivery consistent with DOE's strategic directions

➤➤➤ Enhancing engagement for our community



Overcoming operational challenges to our Mission

Safety Culture

Develop first line supervisors as mentors

Reinforce a culture of trust and accountability

Outcome

Empowered, accountable workforce

- 1 Everyone is personally responsible for ensuring safe operations
- 2 Leaders value the safety legacy they create in their discipline
- 3 Staff raise safety concerns because trust permeates the organization
- 4 Cutting edge science merits cutting edge safety
- 5 A questioning attitude is cultivated
- 6 Learning never stops
- 7 Hazards are identified & evaluated for every task, every time
- 8 A healthy respect is maintained for what can go wrong

Integrated Management System

Assure integration across the lab

Include industry best practices

Outcome

Dependable, reliable and efficient service systems



Work Planning & Control

New institutional ownership reporting to the DLD, Ops/COO

Foster workforce engagement
Plan Work/Work Plan

Outcome

Operational Excellence that minimizes operational upsets





Resolving infrastructure readiness to support the Mission

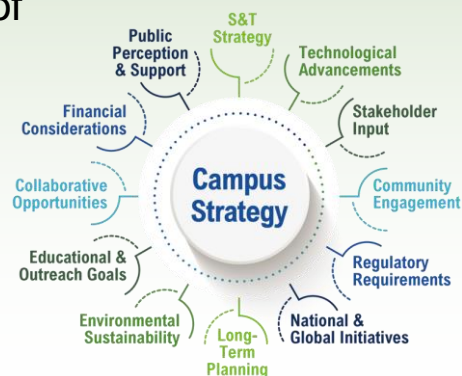
Campus Forward

Overhaul of the Campus Master Plan

Drive operations, investments and ensure mission readiness

Outcome

Stewardship of facilities while embracing a collaborative research environment



Enterprise Financials

Roadmap of system enhancements and tools using Amentum

Provide real-time visibility into the financial state of the lab

Outcome

Responsible stewardship of the investment at Fermilab



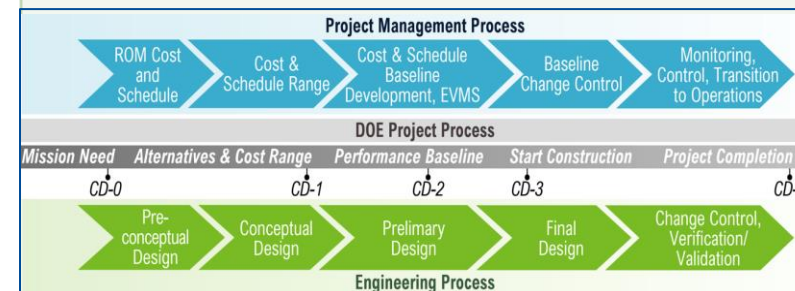
Project Management Excellence

New organizational approach and leaders

Risk informed management with new tools and best practices

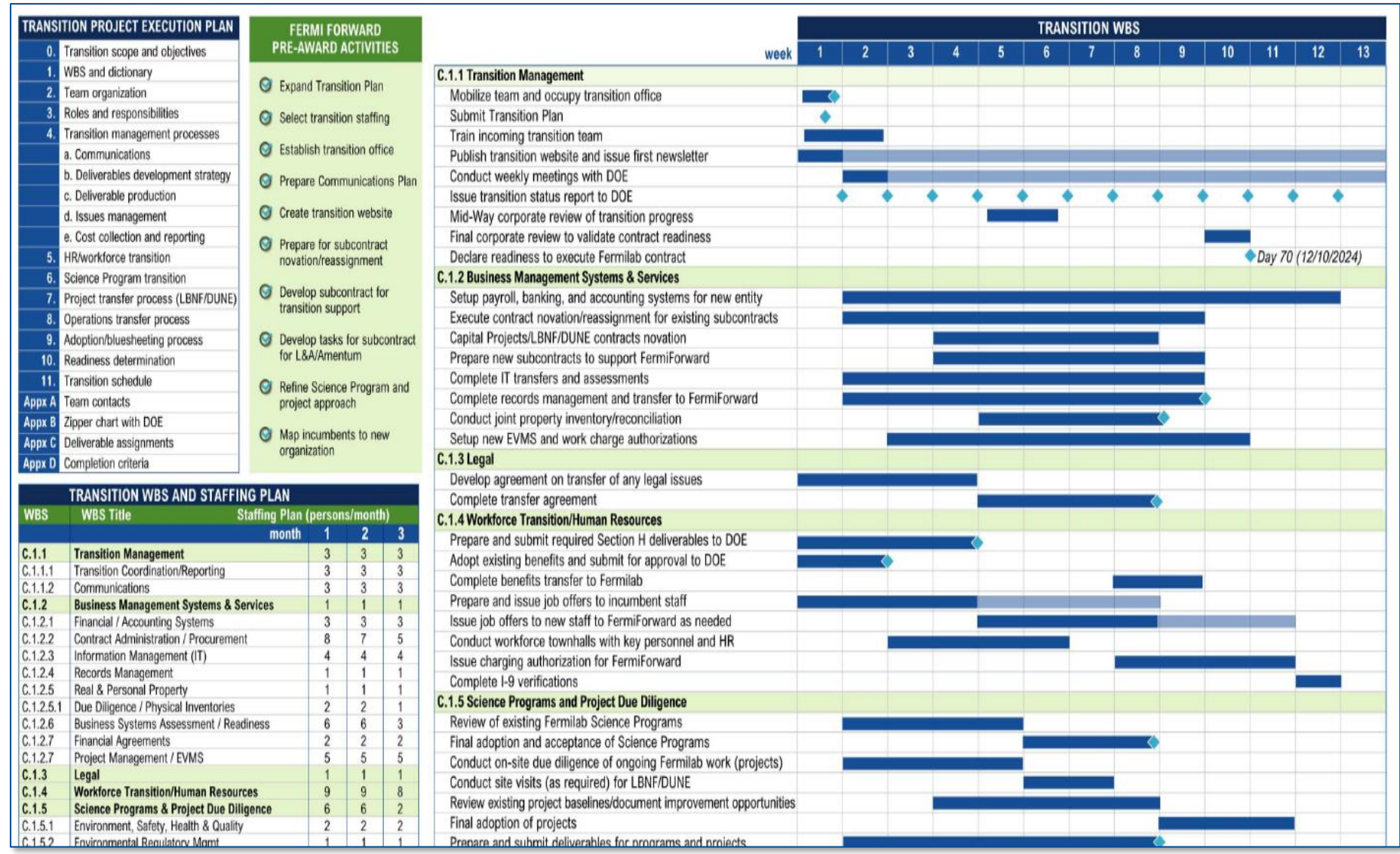
Outcome

On-time, on-budget, as-promised delivery



Contract “Transition” is currently underway (Day 67 of 90)

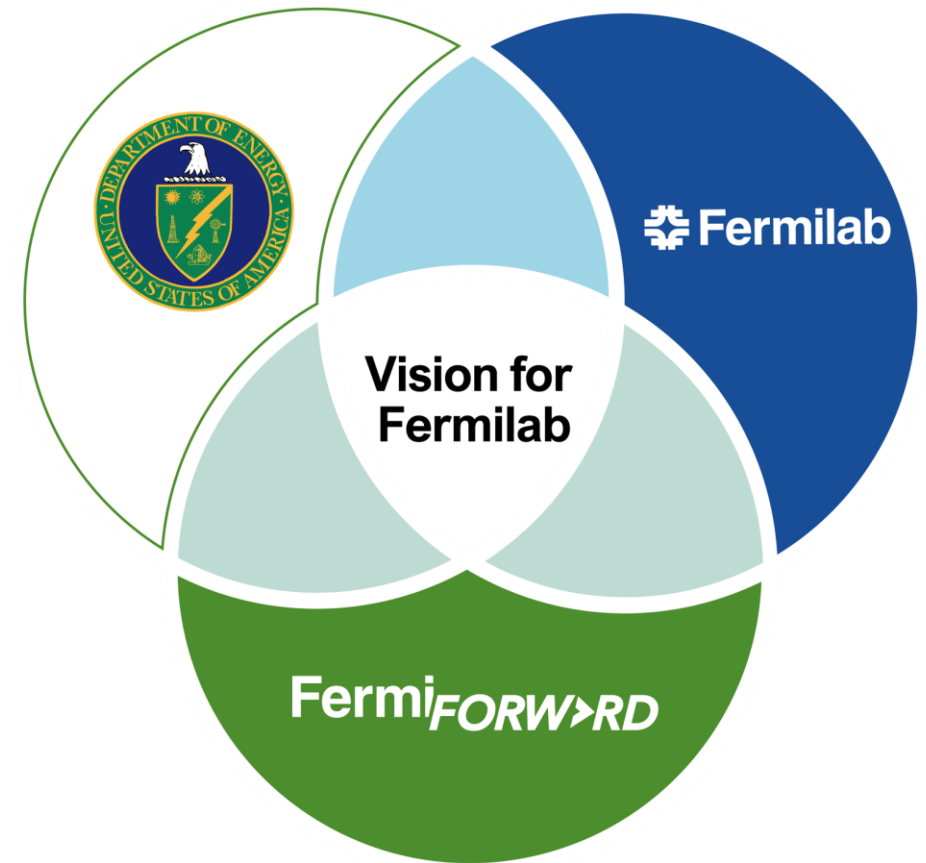
We are looking forward to beginning the new contract on January 1, 2025





Communicate & cooperate for success

Fermilab's partnership with DOE and the HEP community is essential to producing breakthrough science and technology and excellence in operations



Trust • Collaboration • Transparency