



2022 CECOP Symposium • Washington, DC



Sandia Infrastructure Investment Planning (SIIP) Process

Presented by:

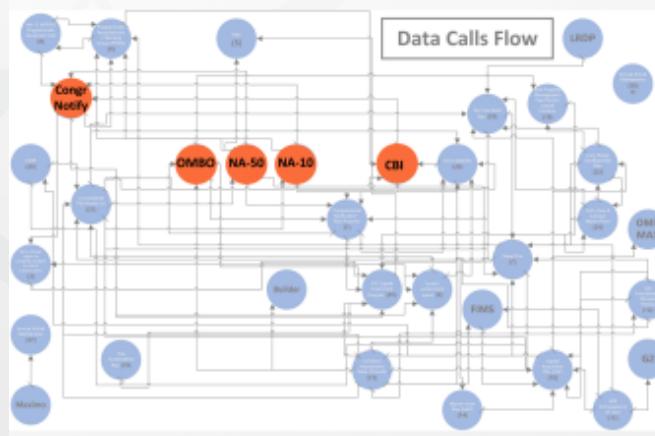
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Inception of SIIP

ISSUES

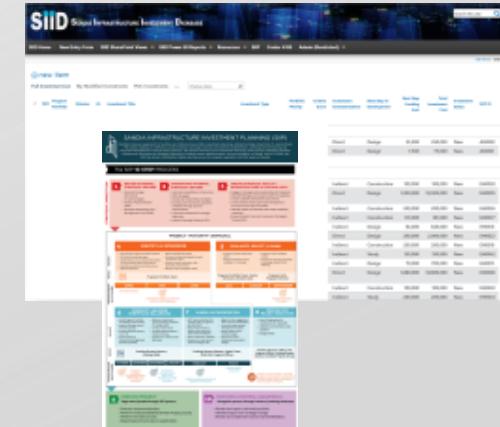


- Lack of corporate planning process and cohesive investment strategy
- Ad hoc and siloed data call processes (30+ databases)
- Prioritization is fragmented across process ownership
- Information is inconsistent due to multiple databases
- Inefficiencies and confusion amongst internal and external customers
- Perception of funding “shopping”

FOCUS AREA



RESULTS



1

Sandia Infrastructure Investment Planning (SIIP) Process

an approach for how Sandia identifies its F&I investment needs to obtain funding

2

“One Database”

a single source of truth for data related to Sandia’s F&I investment needs

- One Database
- Prioritization process including informed funding decisions
- Input from multiple lenses
- Lab-wide Portfolio Balancing
- Better alignment of F&I needs to funding sources
- Documented direction on funding sources use aligned to CAS
- Continuous feedback and improvement

SIIP 10 Step Process

STRATEGIC DIRECTION

1 REVIEW EXTERNAL STRATEGIC DRIVERS

- External Strategy Documents
- Tri-Lab Strategies
- Nuclear Posture Review (NPR)
- Stockpile Stewardship and Management Plan (SSMP)
- Labs-level capabilities and priorities
- PMO strategies
- Sandia site stewardship strategies
- Existing and new Sandia capability validated through sponsor requirements
- Corporate milestones & strategic objectives
- Indirect Planning Guidance (IPG)

2 UNDERSTAND INTERNAL STRATEGIC DRIVERS

- Engage in strategic planning
- Identify ROM gaps and analysis
- Create capability stewardship
- Create Sandia master plans/documents/area plans/LCAs
- Identify needs on timescale/roadmaps
- Review Sandia's Line Item Investment (LIIST) Timing

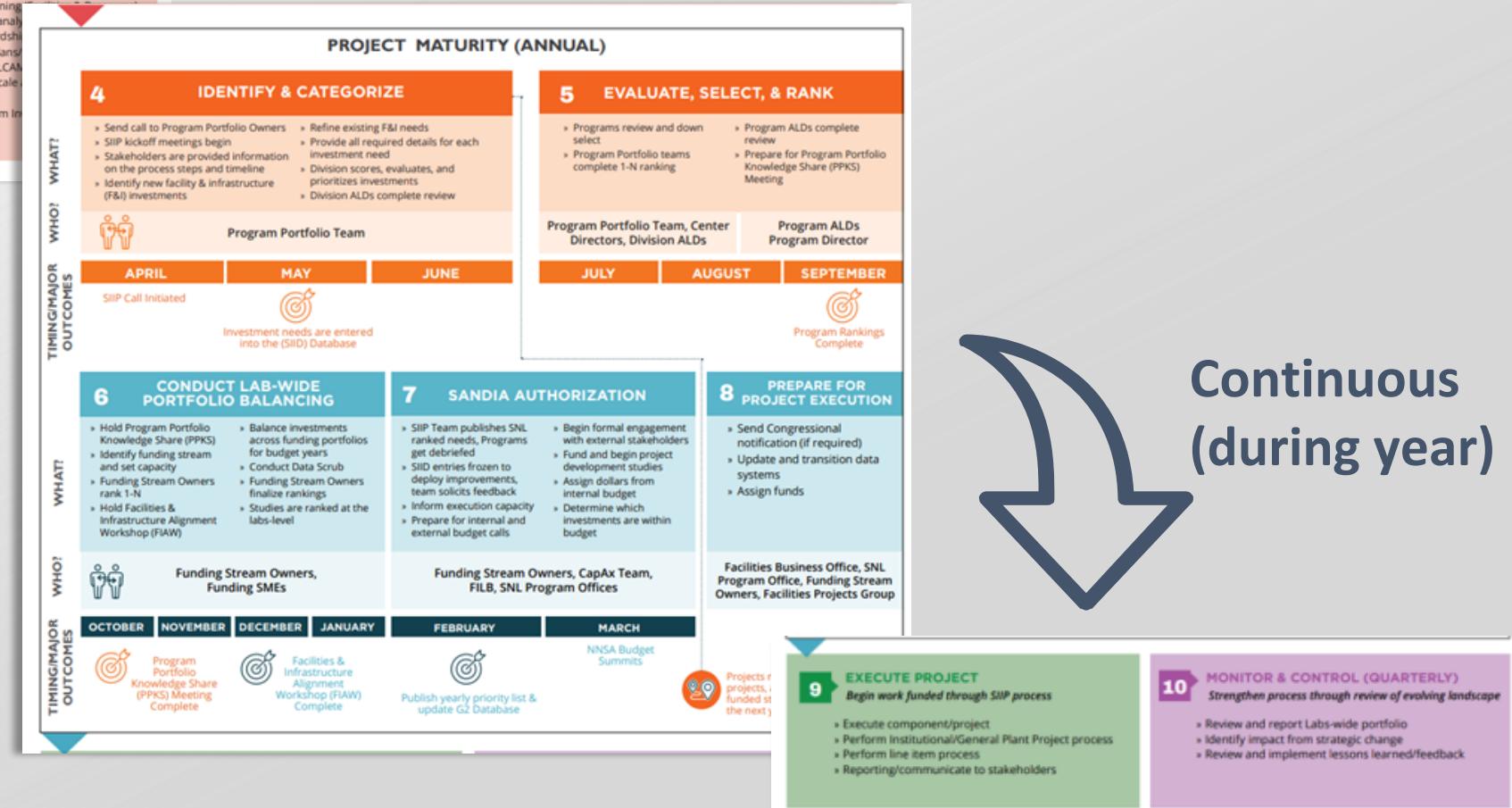
3 CREATE STRATEGIC FACILITY INFRASTRUCTURE & TOOLING DOCS

- Send call to Program Portfolio Owners
- SIIP kickoff meetings begin
- Stakeholders are provided information on the process steps and timeline
- Identify new facility & infrastructure (F&I) investments
- Refine existing F&I needs
- Provide all required details for each investment need
- Division scores, evaluates, and prioritizes investments
- Division ALDs complete review



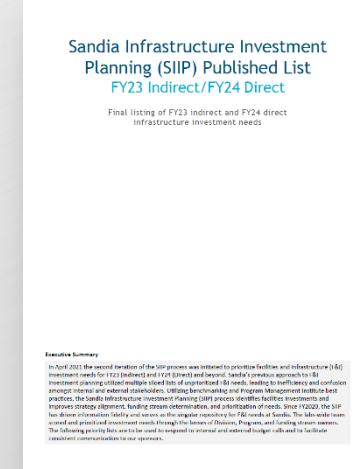
Occasional
(3-5 years)

Annual Process

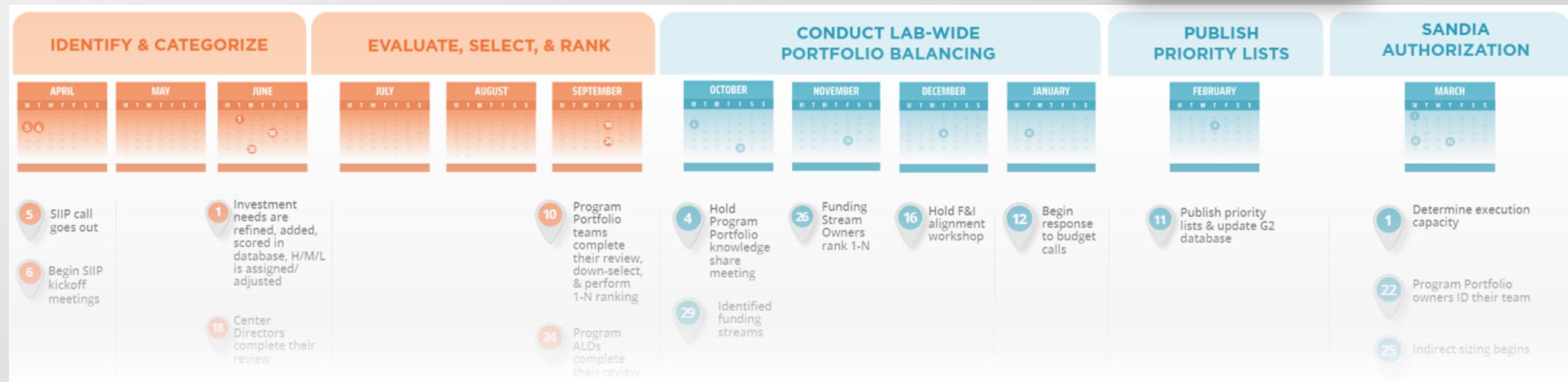


Continuous
(during year)

Annual process

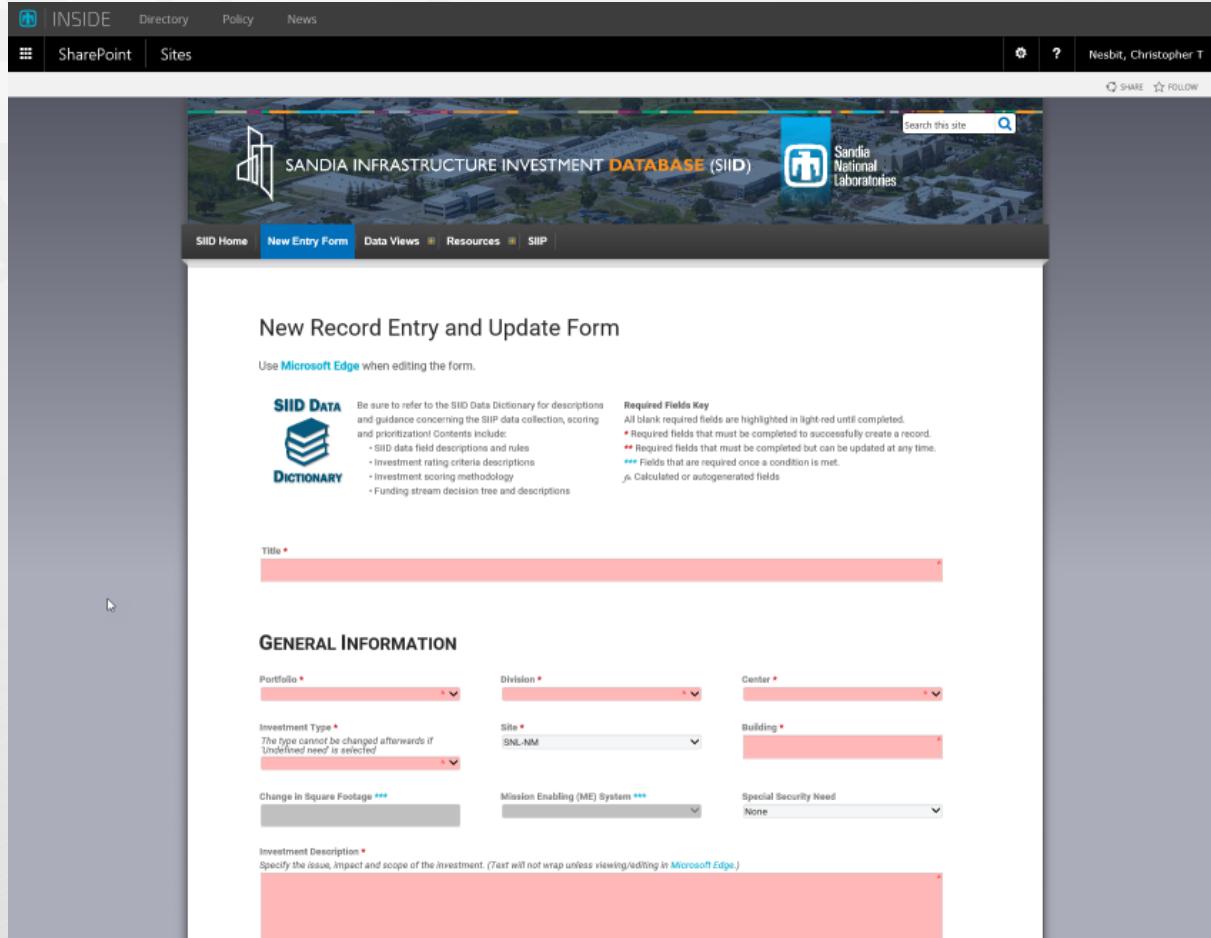


Projects will be executed as funding is available

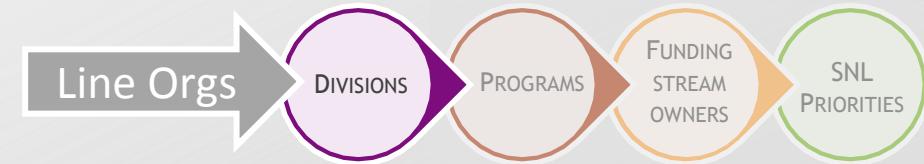




SIID entry data collection



WORKING TOGETHER. ONE MISSION. ONE VISION. ONE NSE.



- Web-based intake portal and data repository
- Title, Portfolio, Division, Center, Investment type, location
- Investment description (Issue, Impact, Scope)
- Risk to Mission Without Investment
- Requirement drivers
- Investment Requestor, Manager, and POCs
- TPC amount, estimate class level, date of estimate, and need by date.
- Initial Funding Stream and Alternate

SIID criteria evaluation

RATINGS & RANKINGS

EVALUATION CRITERIA RATINGS **

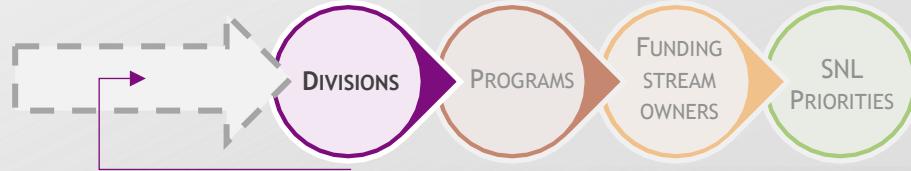
Criteria that do not apply to the selected Investment Type are colored in grey and disabled. Refer to the [SIID Data Dictionary](#) for more info.

	None	Very Low	Low	Moderate	High	Very High
Risk to Mission (RSK)	<input type="radio"/>					
Environment, Safety & Health (ESH)	<input type="radio"/>					
Opportunity (OPP)	<input type="radio"/>					
Uniqueness (UNQ)	<input type="radio"/>					
Site Development Plans (SDP)	<input type="radio"/>					
Facility Operations (FAC)	<input type="radio"/>					
Space Utilization (UTZ)	<input type="radio"/>					
Savings Cost/Benefit (SAV)	<input type="radio"/>					
Deferred Maint Cost/Benefit (DM)	<input type="radio"/>					

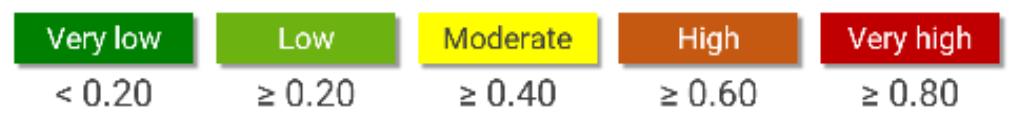
Score f_k	Score Rating f_k	Very low	Low	Moderate	High	Very high
		< 0.20	≥ 0.20	≥ 0.40	≥ 0.60	≥ 0.80

APPENDIX B: SANDIA INFRASTRUCTURE INVESTMENT EVALUATION CRITERIA						
Rating and Score Number	Description	Very low	Low	Moderate	High	Very high
None	Uplift that the asset will cause the mission to not effectively and efficiently achieve the activities performed in through this f_k	Very low likelihood	No reduction in performance margins	Low likelihood	Moderate likelihood	High likelihood
Impact	Impact to reduction in margin of mission performance resulting from the asset	Very low likelihood of mission failure due to the asset	Very low likelihood of mission failure due to the asset	Very low likelihood of mission failure due to the asset	Very low likelihood of mission failure due to the asset	Very low likelihood of mission failure due to the asset
Opportunity	Opportunity of mission failure when factoring condition and utilization of the asset	Very low likelihood of mission failure due to the asset condition or utilization	Very low likelihood of mission failure due to the asset condition or utilization	Very low likelihood of mission failure due to the asset condition or utilization	Very low likelihood of mission failure due to the asset condition or utilization	Very low likelihood of mission failure due to the asset condition or utilization
Risk reduction	Impact to the portion of gap closure or risk reduction to the asset	Very low portion of gap or risk reduction	Very low portion of gap or risk reduction	Very low portion of gap or risk reduction	Very low portion of gap or risk reduction	Very low portion of gap or risk reduction
Security	Uplift of security issues resulting from asset problems/failure	Low likelihood of minor issue	Very low likelihood of minor issue	Very low likelihood of minor issue	Very low likelihood of minor issue	Very low likelihood of minor issue
Environment, Safety & Health (ESH)	Uplift of ESH issues (or incidents) resulting from asset problems/failure	Very low likelihood of serious issue	Very low likelihood of minor issue	Moderate likelihood of serious issue	High likelihood of serious issue	Very high likelihood of serious issue
Environment, Safety & Health (ESH)	Correctness of a gap/deficiency in meeting a regulatory mandate	Very low likelihood of serious issue	Very low likelihood of minor issue	Moderate likelihood of serious issue	High likelihood of serious issue	Very high likelihood of serious issue
Opportunity (OPP)	Impact of the benefits or opportunities from the investment to the associated programs or stakeholders	No long-term benefits; minor short-term benefits	Moderate long-term benefits; minor short-term benefits	Moderate long-term benefits; significant short-term benefits	Significant long-term benefits; minor short-term benefits	Significant long-term benefits; "Very high" short-term benefits
Scope of opportunity	Scope of impacts/and/or emerging needs promoted by the investment across programs	No scope of impacts/emerging needs are identified	Moderate scope of impacts/emerging needs are identified	Moderate scope of impacts/emerging needs are identified	Significant scope of impacts/emerging needs are identified	Significant scope of impacts/emerging needs are identified
Uniqueness (UNQ)	Difficulty of replacing the function(s) of the asset(s) with a viable alternative	Alternatives are available within same division, program or facility, other sites do not need to be considered	Alternatives are available within same division, program or facility, other sites do not need to be considered	Challenging: Alternatives may be available or feasible but requires cross-organizational negotiation; likely scope is not well defined or not well considered	Challenging: Alternatives are unlikely to be available, unavailable or feasible, may be available from other sites	Fairly difficult or impossible: Alternatives are not available or feasible
Uniqueness or specialization	Level of uniqueness or specialization of the asset(s)	Very low: Little to no specialization, not unique	Moderate: Somewhat commercial specialization, fairly unique	High: Fairly specialized, highly unique	Very high: One-of-a-kind specialization, unique to Sandia	
Site Development Plans (SDP)	Capacity and/or resilience	Capacity and/or resilience that benefits the utility and/or infrastructure of multiple buildings as a result of the investment	No capacity and/or resilience benefits	Moderate capacity and/or resilience benefits	Significant capacity and/or resilience benefits	Major capacity and/or resilience benefits
Part of larger site development strategies	Importance of the investment as part of a larger site development strategy (e.g., Site-Wide Master Plan, Site-Wide Master Plan and/or Site Sustainability Plan)	Importance of the investment to the Site-Wide Master Plan and/or Site Sustainability Plan	Importance of the investment to the Site-Wide Master Plan and/or Site Sustainability Plan	Moderate importance to the Site-Wide Master Plan and/or Site Sustainability Plan	Significant importance to the Site-Wide Master Plan and/or Site Sustainability Plan	Major importance to the Site-Wide Master Plan and/or Site Sustainability Plan

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- 9 Scoring Criteria (Risk, Safety, Opportunity, Uniqueness, Site Development, Facility Ops, Space Utilization, Fac Ops Savings, DM Savings)
- Notes for criteria scoring captured during intake and Division review.
- Scoring value is normalized, 0.00 – 1.00 scale, project specific – not all criteria may apply
- Criteria scoring based on definitions, but may have variance – Used to initiate conversation, not yet determinant



Need vetting and prioritization

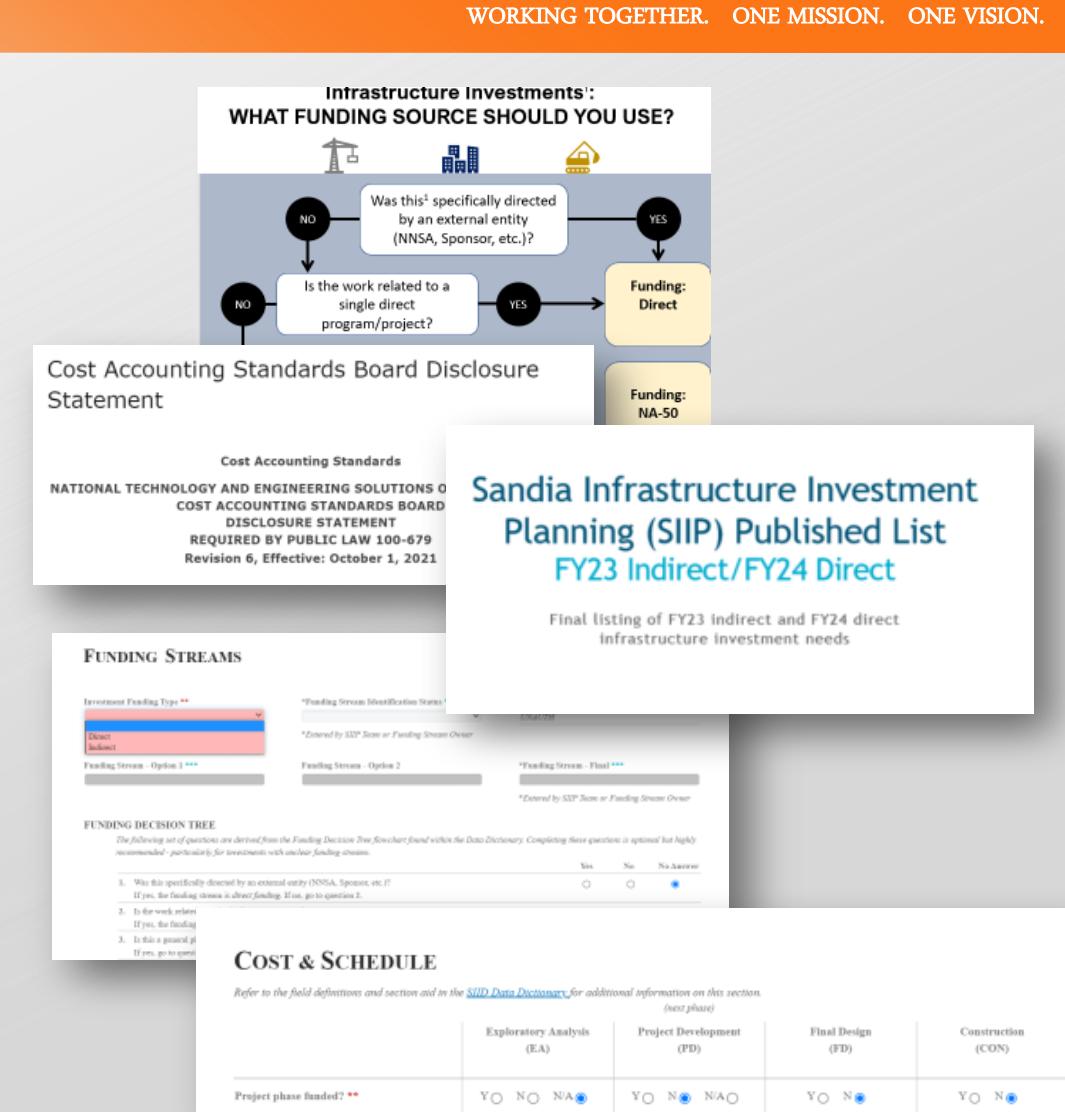


- **Identifies** Wants vs. Needs
- SME need detailed intake knowledge
- Down-selects entries to operational impacts (VH-VL)
- 1-N all needs (operations)
- **Integrates** Division priorities by project type
- Program integration understanding
- Down-selects entries (further) to risks and deliverable impacts
- 1-N (mission)
- **Balances** need funding requests to funding portfolios
- Reviews and confirms need match to funding sponsors
- Proposes funding source rank order based on 1-N priorities
- **Publishes** “Single List” of needs for yearly budget summits
- Down-selected needs specific to budget year
- Ranking within historical funding and over-target priorities



Funding Identification

- Principled approach to ensure correct funding source is identified
- Funding Decision Tree, Cost Accounting Standards Disclosure Statement, and team of experts determine funding source
- Funding stream owners review, approve and rank investments
- Published list of investments available for funding input
- Requests approved through normal processes
- SIID updated when funding is secured



Scoring, prioritizing, ranking, balancing, publishing



- Division generally down-selects to a Top Needs only list for budget targets
- Program aggregates Division 1-N lists and filters to project type for ranking
- Program down-selects project type list respecting top Divisions' rankings and utilizes criteria score for ties
- Funding sources balance aggregate project types to external criteria (if available) and historical funding
- Planning publishes year end list for budget conferences

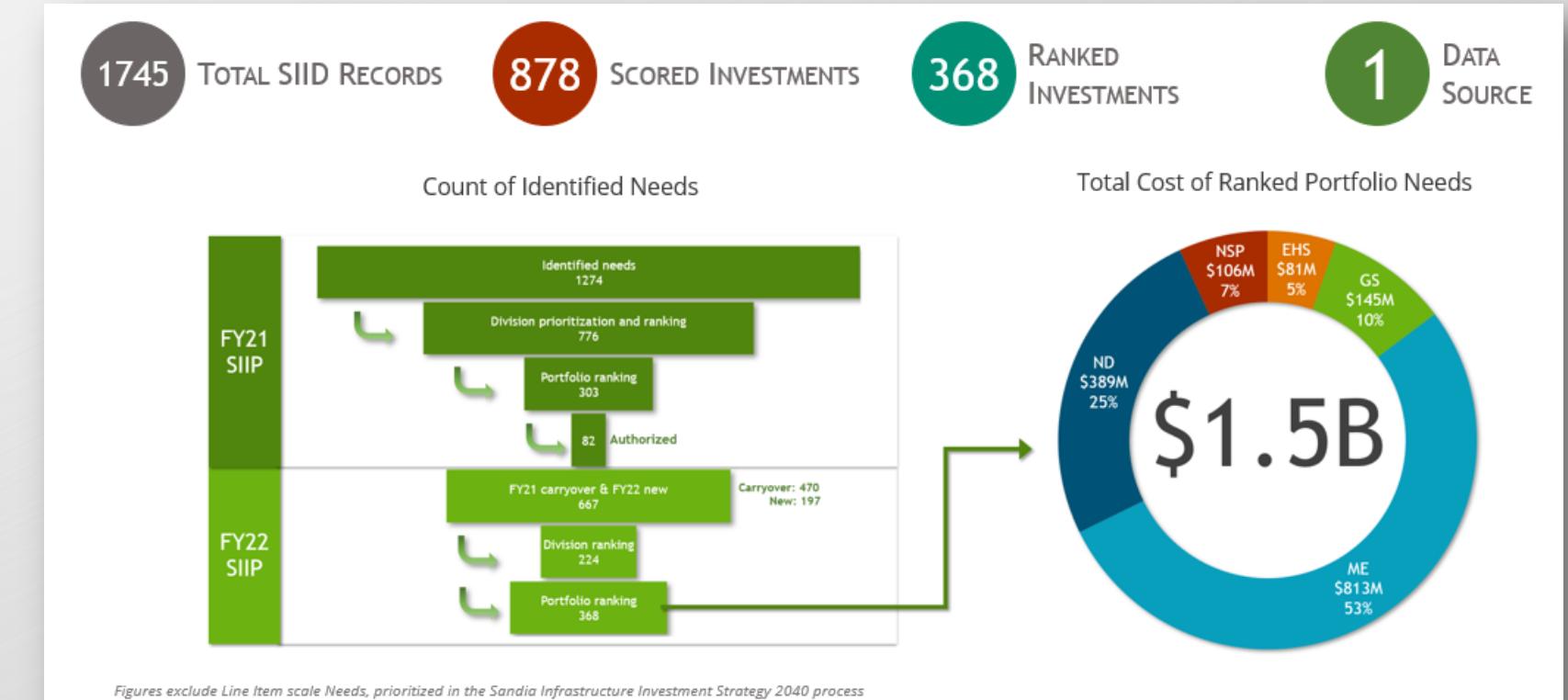
Where we are, where we're going

• Where We Are

- Significant data collection in previous iterations
- Substantial efforts to score and rank needs

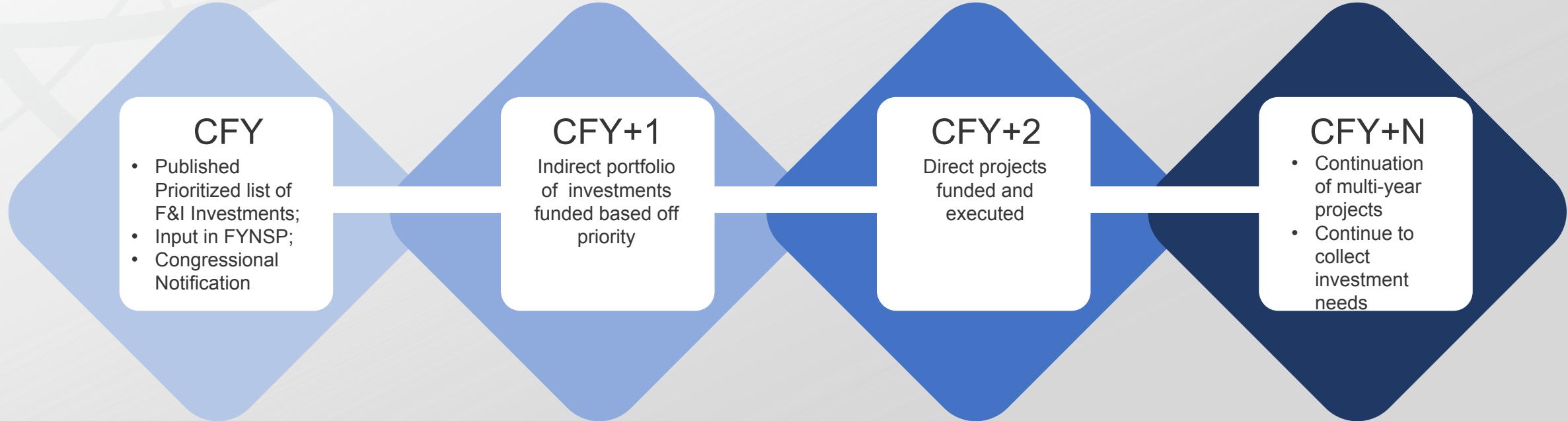
• Where We are Going

- Further refinement of existing investment needs
- Slotting in emerging needs
- Adjust ranking in response to changes in program strategic direction
- Balancing long range planning with shorter term needs (at the right level of effort)
- Continuous engagement with external sponsors to communicate gaps/needs



In Progress: Set priorities for FY24 Indirect / FY25 Direct Investment Needs

What happens next?





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Questions?

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