

May 3, 2023

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Director, Facilities and Site Services

# INL Infrastructure Transformation Past, Present and Future

Battelle Energy Alliance manages INL for the  
U.S. Department of Energy's Office of Nuclear Energy



Idaho National Laboratory

# Unique INL site, infrastructure, and facilities enable energy and security RD&D at scale

**\$1,630 M** FY22 Total Operating Cost  
**5,700+** Employees  
**569,178** Acres  
**890** Square Miles

- 4** Operating reactors

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- 12** Hazard Category II & III non-reactor facilities/ activities

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- 50** Radiological facilities/activities

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- 17.5** Miles railroad for shipping nuclear fuel

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- 44** Miles primary roads (125 miles total)

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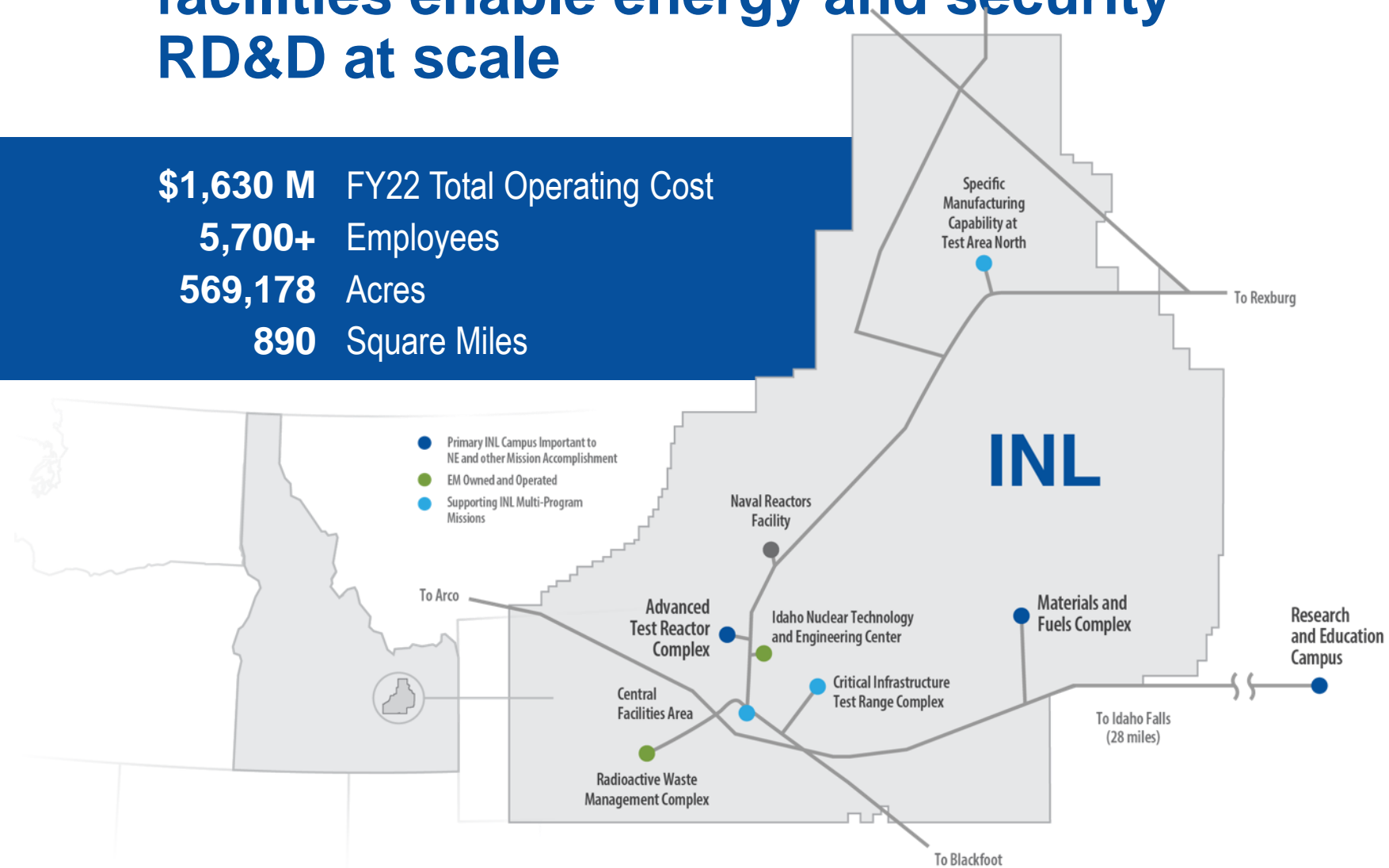
- 9** Substations with interfaces to two power providers

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- 126** Miles high-voltage Transmission & Distribution lines

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- 3** Fire Stations

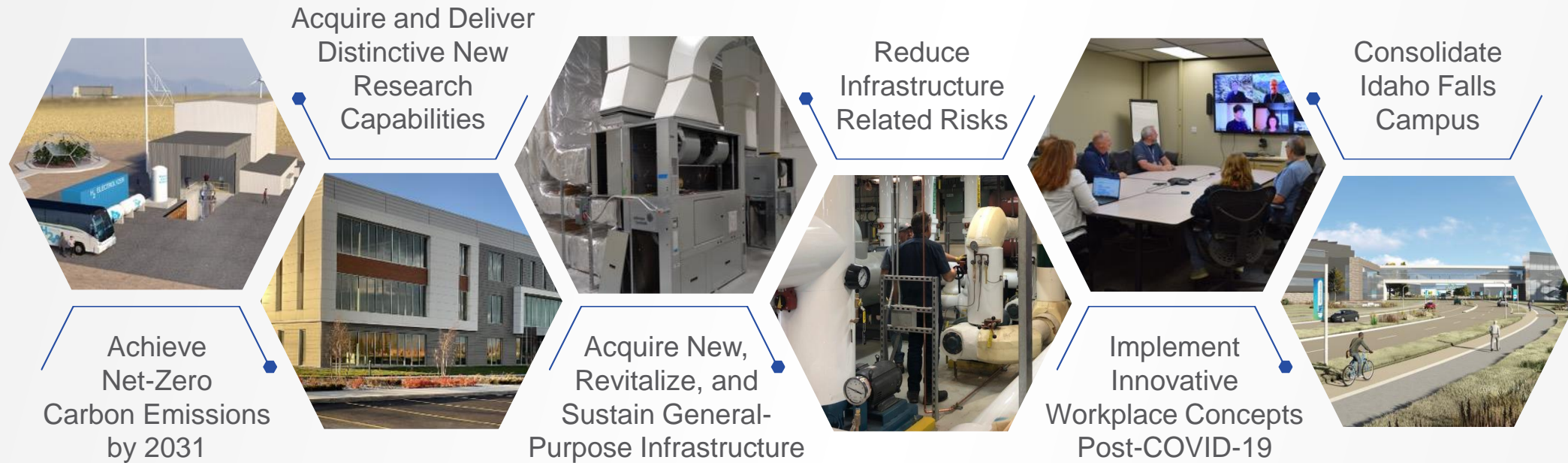








# Our Strategy to Transform INL's Infrastructure



**STRATEGY IS ACHIEVED THROUGH A COMBINATION OF DIRECT AND INDIRECT INVESTMENTS**

# MK Simpson Blvd- *the Research and Education Campus (REC)* *Before and After*



2003



Today



# Significant progress achieved delivering new S&T capability and enabling infrastructure since 2008

2008	2009	2010	2011	2012	2013
 <p>IF-680 UB-1</p>	 <p>CAES</p>	 <p>MFC RCL</p>	 <p>IF-683 RESL</p>	 <p>MFC IMCL</p>	
 <p>IF-681 UB-2</p>	 <p>MFC VEDS</p>	 <p>ATR RaCL</p>	 <p>MFC-1727</p>	 <p>IF-685 ESL</p>	
 <p>IF-682 UB-3</p>	 <p>ATR TTAF</p>	 <p>B21-625</p>		 <p>IF-688 EIL</p>	
	 <p>ATR TSB</p>				
	 <p>IF-684 UB-4</p>				

# Significant progress achieved delivering new S&T capability and enabling infrastructure since 2008



# FY23 Infrastructure Investments

## Advanced Test Reactor (ATR)



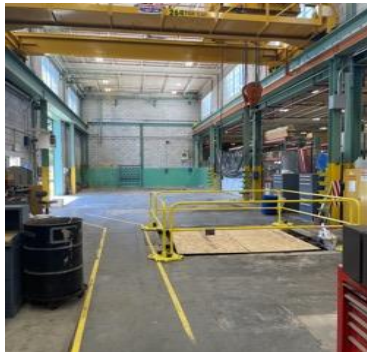
Reactor Support Building



Parking Lot Expansion



ATR Plant Heat Investments



ATR Fabrication Shop Improvements



Building 658 Roof Replacement

## Materials and Fuels Complex (MFC)



Sample Preparation Laboratory



MFC Security Building



West Campus Office Building



NRIC Dome Test Bed



NRIC LOTUS Test Bed



MFC Fabrication Shop Improvements



# FY23 Infrastructure Investments

## Central Facilities Area (CFA) and Sitewide



Power Utilities Building



Consolidated Training Facility



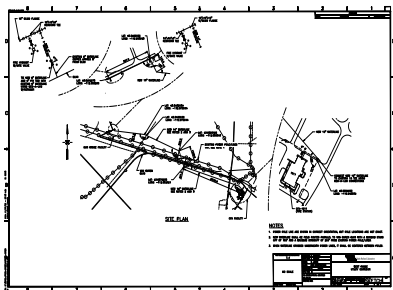
CITRC Test Pad Facility



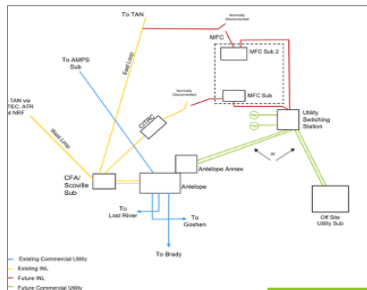
Cafeteria Remodel



Fire System Upgrades



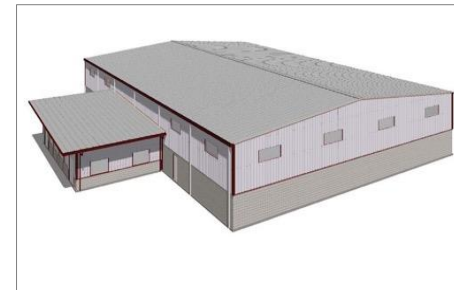
West Range Utility Corridor



Power Grid Upgrades



Multi-Program Highbay Upgrades



Production Support Facility



Utility Corridor Upgrade

## Specific Manufacturing Capability (SMC)

# FY23 Infrastructure Investments

## Research and Education Campus



New Lease Acquisition & Improvements



SMC Secure Building at IRC



NHL Lease Replacement



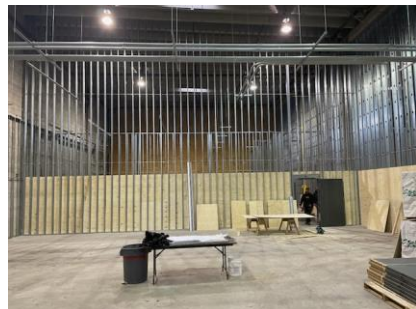
IRC Roof Replacement



Chemical Storage Facility HVAC Upgrades



BCTC Exit



Lindsay Blvd Improvements



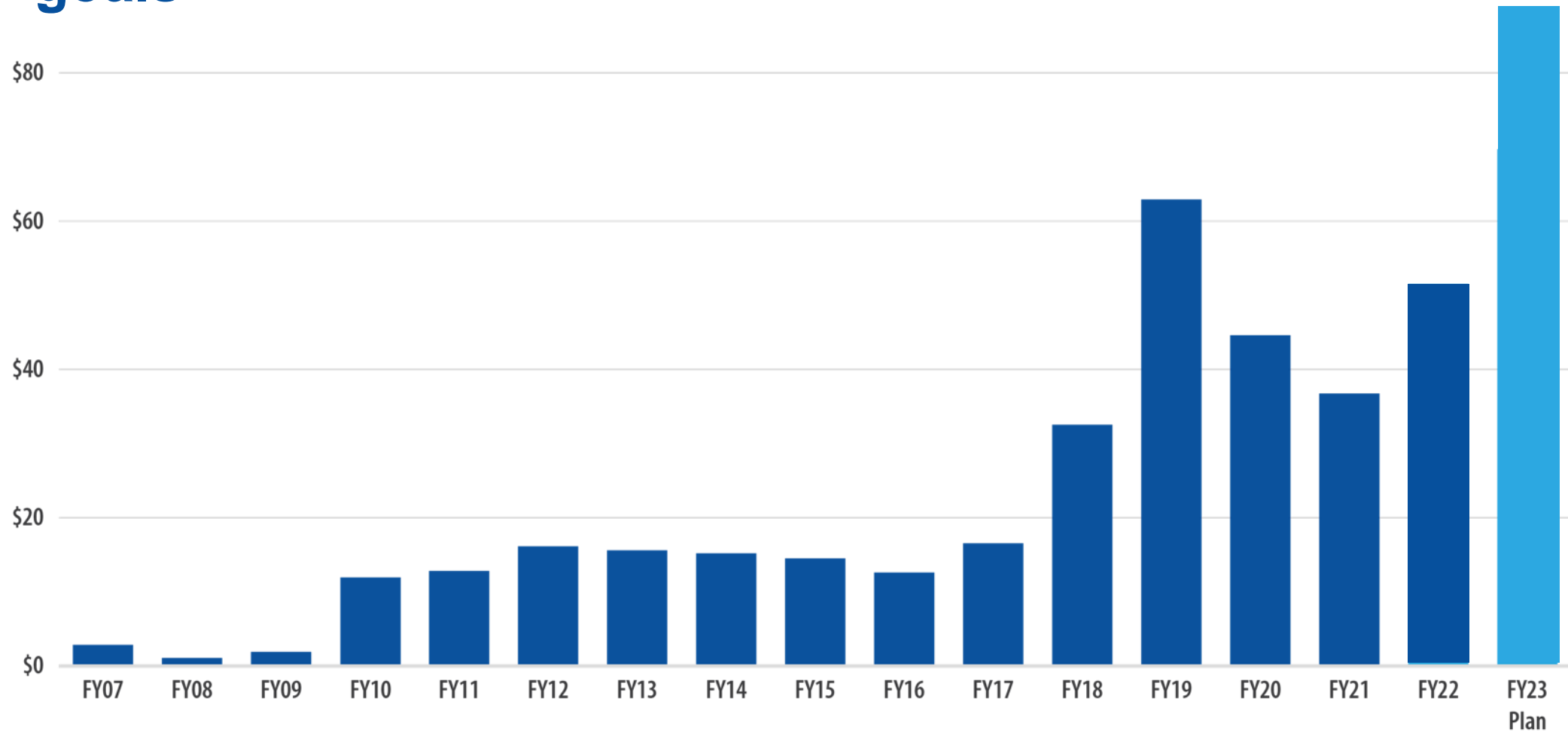
Collaborative Computing Center Cooling Upgrades



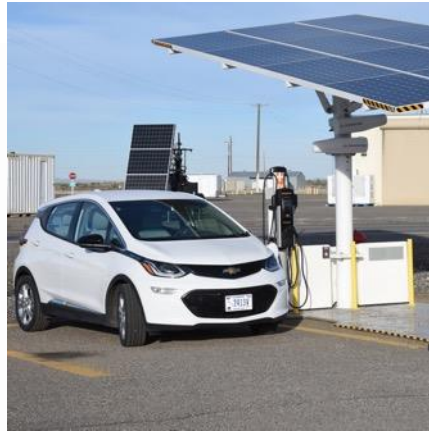
Energy System Laboratory Upgrades



# We have maintained a strong commitment of institutional infrastructure investments to achieve our transformation goals



# INL is developing and deploying solutions now to move towards net zero



**600+**  
Total vehicles



**5,700+**  
Employees



**300+**  
DOE-owned  
buildings & trailers



**50+**  
MW purchased

**NET-ZERO**  
STARTS WITH INL

**NET  
ZERO  
LABS**  
U.S. DEPARTMENT OF ENERGY





# Idaho National Laboratory

*Battelle Energy Alliance manages INL for the U.S. Department of Energy's Office of Nuclear Energy. INL is the nation's center for nuclear energy research and development, and also performs research in each of DOE's strategic goal areas: energy, national security, science and the environment.*