

**National Institute of Standards and Technology
Gaithersburg Campus
Draft Master Plan
Gaithersburg City Council Briefing
February 5, 2018**



United States Department of Commerce

NIST Gaithersburg Campus Master Plan

- Improves campus access points to address congestion and security
- Maintains green perimeter and increases tree cover
- Improves stormwater management
- Modernizes older buildings and site utility infrastructure
- New construction focused on research facilities
- Respects historic district/features with new building placement
- Anticipates funding after 2020, except for one lab modernization underway



- **Founded in 1901 as National Bureau of Standards**
NIST is a non-regulatory agency and Federal research laboratory in the US Department of Commerce
- **Campus Established in 1960's**
Relocated from Washington DC as NIST Headquarters
26 buildings constructed 1961-1969 = 73% of current assigned space
- **Campus Size**
579 acres
62 buildings & structures, 3.64 million gross sq. ft.
4,000 personnel, 20% FTE live within Gaithersburg zipcodes
- **Historic District - 2016**
Eligible for listing on the National Register of Historic Places
- **Visitors**
Approx. 33,000 visitors per year, average 250 per day
- **Conferences (2016)**
Hosted 77 (many multi-day) with a total of 7,577 attendees
- **Commercial Vehicles**
Approx. 18,000 vehicles per year, average 71 per day

Existing Site Plan



Existing Campus



Key Drivers & Issues

Current Issues

- Aging buildings with obsolete systems
- Poor Lab Environmental Controls
- Outdated/obsolete site infrastructure
- Security & circulation issues at Gates
- Pedestrian connection improvements



Future Requirements: 20 years

- Precision measurement and flexible labs for expected program growth
- Specialty labs for planned research
- Office space for improved utilization and expected 27% staff increase



Master Plan Program

Mission for Advancing Measurement Science & Technology:

- Requires flexible, integrative, collaborative space
- Requires highly controlled research environments

MASTER PLAN PROGRAM	EXISTING		20 YEAR PROJECTIONS		20 YEAR GROWTH & CHANGE	
	People #	Space ASF	People #	Space ASF	People #	Space ASF
ASF = Assignable Square Feet						
PROJECTED GROWTH						
People	4,007		5,106		1,099	
Office/Labs/Support Space		615,463		2,339,446		513,744
Subtotal - Growth	4,007	1,825,702	5,106	2,339,446	1,099	513,744
ADDITIONAL FACILITY NEEDS						
Expansions/New Facilities				93,755		93,755
TOTAL EXISTING & NEW FACILITIES						
	ASF	1,825,702		2,433,201	ASF	607,499
	GSF	3,641,255	est. GSF	5,050,000	est. GSF	± 1,400,000
RENOVATION					GSF	2,083,965

Goals & Purpose of the Master Plan

- Comprehensive 20 year framework
- Appropriate facilities and infrastructure for advanced research
- Maintain attractive campus environment
- Respect & embrace campus designation as a Historic District
- Support & advance sustainable design & environmental goals
- A plan for gradual change, complete at each step
- NEPA compliance thru development of Environmental Assessment



Campus Today



DECEMBER 03 2017

NIST MD EXISTING

Campus 20-Year Master Plan



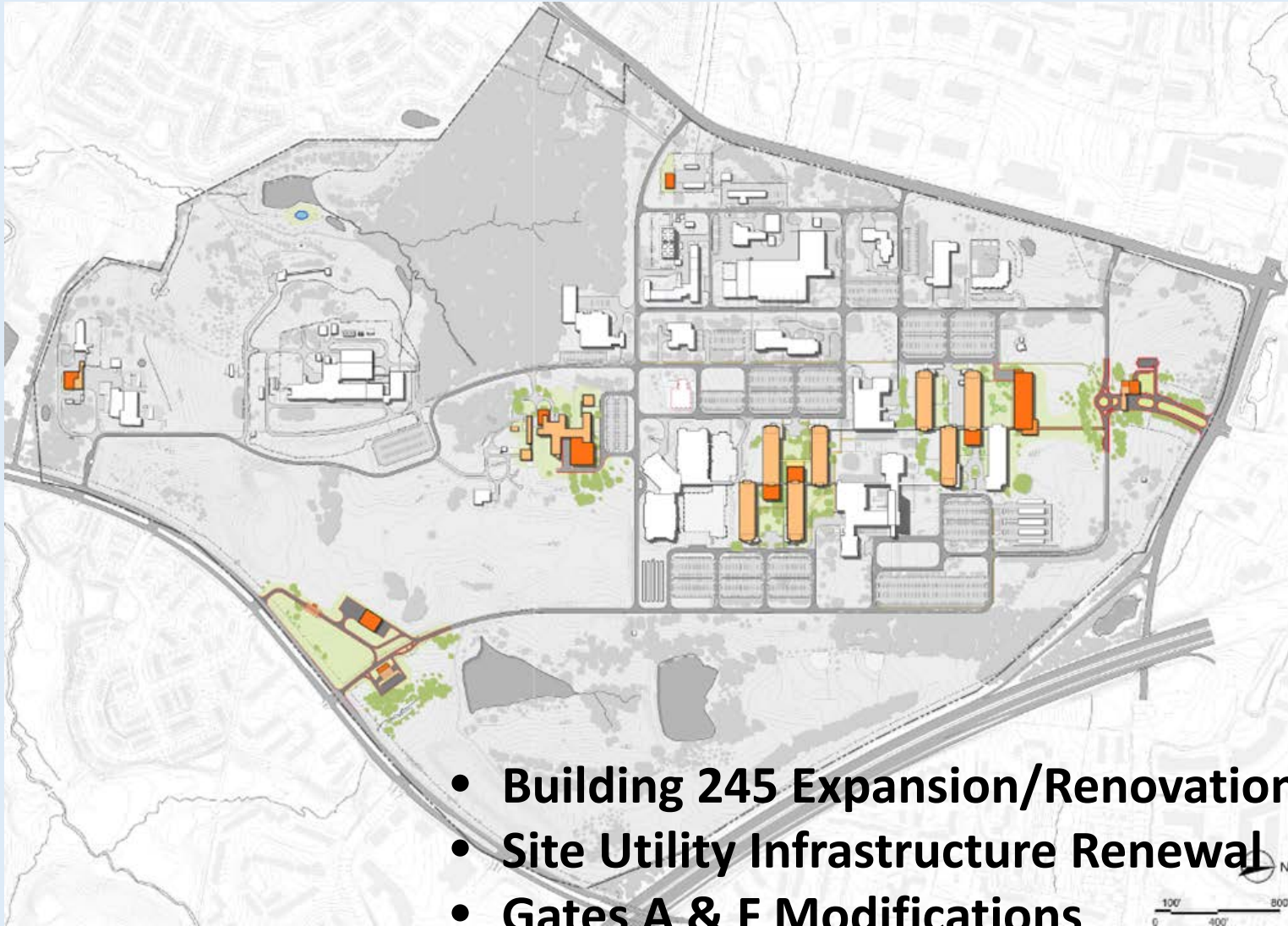
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NIST MD

Campus 20-Year Master Plan



Phase 1 – Immediate Priorities



- **Building 245 Expansion/Renovation (underway)**
- **Site Utility Infrastructure Renewal**
- **Gates A & F Modifications**
- **New Research Building**
- **Existing Laboratories: Phased Modernizations**

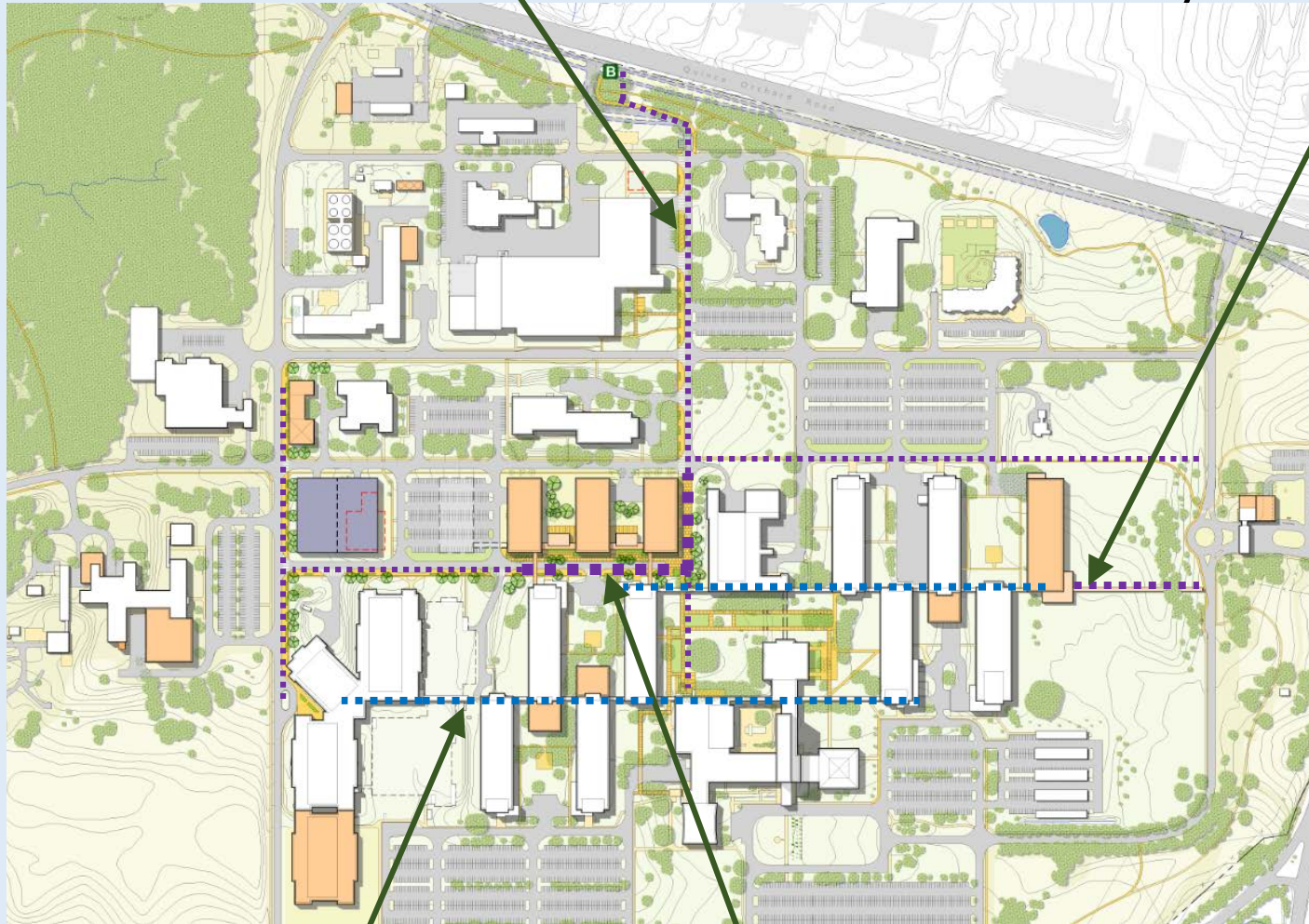
Gates A & F Improvements



Center Core & Enhanced Pedestrian Connections

Walkway from center core to Quince Orchard Rd.

New research building with covered walkway to Gate A



Existing pedestrian concourses

New research buildings with pedestrian way, limited traffic

Environmental Assessment (EA)

Developed in accord with National Environmental Policy Act (NEPA)

- Reviews environmental consequences of:
 - Proposed Action Alternative (i.e. the Master Plan)
 - No Action Alternative
- Summarizes effects and mitigation measures and finds that:
 - For most resource areas, impacts are positive overall, with some minor temporary adverse effects during construction
- Highlights of EA
 - Minor economic benefits from staff increase, increased construction and increased productivity from campus improvements
 - 16% increase in impervious surfaces; potential long-term improvements to stormwater quality and reduction of quantity
 - Landscape with increased native vegetation, meadows, & reforestation
 - Moderate demand increase in utilities but improved efficiencies through building & system modernization
 - LEED Gold or net-zero energy facilities, extensive renewable energy

Draft Master Plan & Draft EA Comments

- Comment period ends March 31, 2018

- Submit written comments to:

nistMPcomments@nist.gov

or

NIST Master Plan Comments
National Institute of Standards and
Technology

100 Bureau Drive, MS-1900

Gaithersburg, MD 20899-1900



- The Draft Master Plan and Draft Environmental Assessment are available to view or download at:

<https://www.nist.gov/ofpm/nist-gaithersburg-master-plan>

Simulated Flyover Video