

## **Land Development Systems Modernization**

**BOS Information Technology Committee** 



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#### **Alignment with County Strategic Initiatives**

- Board's Economic Success Strategic Plan
- Fairfax First
- zMOD
- Chairman's Community Council of Land Use Engagement
- LOB Phase 2 (IT)
  - #9: Modern, private-sector experience
  - #22: Digitization and multi-system integration opportunities





#### **Key Outcomes**

- Customer Service Portal for Developers/Industry Partners and Citizen Constituents —real time status and transparency
- GIS integration
- Modernized mobility platforms for customers and staff
- e-Plans Integration









Critical IT areas identified in Fairfax First Study & Gartner Land Use and Development Services Strategic Assessment

Replace aging, disparate legacy systems that are heavily customized and not able to meet County business process and customer service goals.

1997 Land Development System (LDS)

20 years old

- Zoning and Planning System (ZAPS)
- Plans and Waivers System (PAWS)
- 2003 Fairfax Inspections Database Online (FIDO) 14 years old



**Vision element**: Integrated technology that enables seamless customer and staff interactions, and supports land use and development operations



#### **Current FIDO & LDS IT Architecture Challenges**

- "Fat Client" App loaded on over 650 PCs and laptops
- Database environment obsolete; no longer supported with security vulnerabilities
- Web Portal: Customized in-house solution to meet County business requirements
- Mobile: Custom development FIDO 'fat client technology' virtualized via Citrix
- Third party COTS mobile solution circa 2008 for building inspections used by DPWES
- Legacy Reporting architecture inherent
- E-plans solution 'bolt-on' to both LDS and FIDO



Metrics and Statistics

LDS/PAWS/ZAPS: 300 Users

• 423 Plan/Arrangement Types

• 60,000 Transactions processed: 60,000 (2016 data)

**FIDO:** 650 Users

• 114 Permit/Plan/License types

• 380,000 Transactions processed (2016 data)

#### **Annual metrics:**

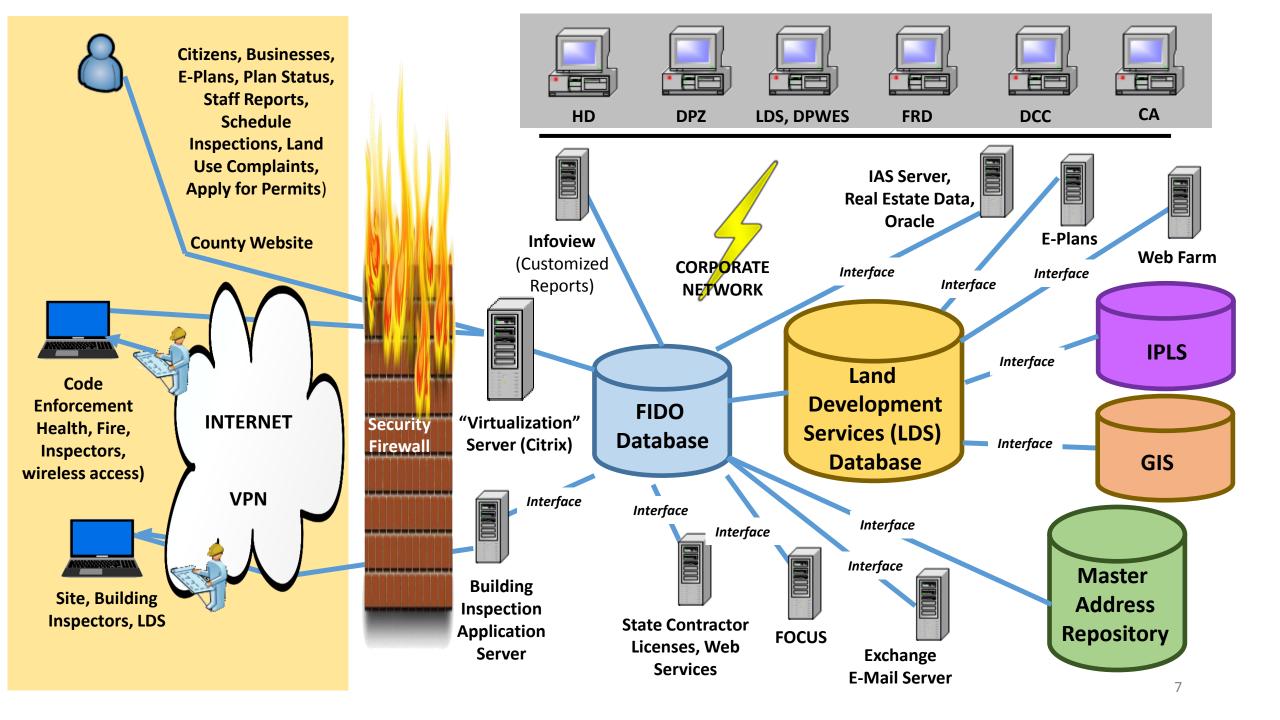
• 250,000 Inspections performed

• 64,000 Permits issued

• 37,000 Plans reviewed

• 13,000 Violation notices issued

• \$47 M Revenue collected annually





#### PLUS – Planning and Land Use System Project

- Replace ZAPS in Department of Planning and Zoning
- Replace PAWS in Land Development Services
- Replace LDSNet Legacy Land Development Information Portal
- Replace **FIDO** permits inspections, complaints, environmental health permits
- Replace or Integrate ePlans (electronic plans) submission
- Replace multiple ancillary systems, internal databases & spreadsheets
- Integrate with **Data Warehouse** (self-service history and FOIA inquiry)
- Develop Proffer Tracking/Management
- Redesign Comprehensive Plan
- Integrate 20+ Interfaces



#### **Supporting IT Infrastructure Integration**

- WEB site: (Portal for PLUS, e-Plans submission, requests, scheduling, payment, status, engagement, etc.).
- GIS
- Master Address Repository
- CRM platform
- Secure mobile platform
- County Virtual Data Center environment
- FOCUS



#### **Stakeholder Agencies**

- Land Development Services
- Department of Planning and Zoning
- Health Department, Environmental Services
- Fire and Rescue Department
- Department of Code Compliance
- Department of Information Technology

Governance: PLUS Steering Committee and Project Teams



#### **Collaborative and Reviewing Agencies**

- Department of Transportation
- Department of Public Works and Environmental Services
- Fairfax County Schools
- Fairfax Park Authority
- Fairfax Water
- Virginia Department of Transportation



### **IT Project Approach**

- Refine 1000+ functional requirements from 13 business area teams (plus 300 technical requirements) in four main categories:
  - "CORE" systems to be replaced
  - Environmental Health (non-land planning and development processes)
  - Comprehensive Plan automation
  - Extended Proffer Tracking
- Acquire Solution: modern, integrated technology platform that is proven in other large, complex jurisdictions and with sustainable future
- Implement:
  - Agile, multi-phased; Iterative development approach
  - Process Improvements from Fairfax First Task Teams incorporated

#### **System Capabilities Mapped by Department**

Fairfax County Stakeholders	High-Level System Capabilities													
	Customer Portal	Application Mgmt.	Land Use & Entitlement	Hearings	Ordinance Mgmt.	Proffer Mgmt.	Plan Review	Permitting	Inspections	Enforcement	Financial Mgmt.	Reporting	Mobility	GIS
DPZ – Zoning Evaluation	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓	✓				✓	✓		<b>√</b>
DPZ – Zoning Admin	~	~	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	~	<b>✓</b>		<b>✓</b>
DPZ - Planning	✓	✓	✓	✓	✓	✓	✓				✓	✓		✓
LDS – Intake	✓	✓			✓			<b>✓</b>			<b>✓</b>			<b>✓</b>
LDS – Site	✓	✓	<b>✓</b>	<b>✓</b>	✓	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>
LDS – Buildings	✓	✓			<b>✓</b>	<b>✓</b>	~	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Dept. Code Compliance	<b>✓</b>			<b>✓</b>	<b>✓</b>	✓	<b>✓</b>		<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Health	✓	✓		<b>✓</b>	✓	✓	✓	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓
Fire & Rescue	<b>✓</b>	<b>✓</b>			<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>

Additional departments depend on data from the system: Dept. of Transportation, Tax Administration, Finance, Housing & Community Development, Park Authority, OCR, OEM, Dept. of Family Services, Office of the County Attorney, OPA

#### **Projected Timeline**

- Acquisition Process Summer 2017 to Summer 2018
- Iterative Configurations to Replace Core 2018 -2020
- Go-Live Baseline 2020
- Extended Configurations Ongoing

# Land Development Systems Modernization



- Customer Service Portal for Developers/Industry Partners and Citizen Constituents – more real time status and transparency about their permit applications and transactions
- GIS integration
- Modernized mobility platforms for customers and staff
- E-Plans Integration
- Decrease process/cycle times
- Business transformation support unifying silos and disparate business processes
- Scalable and flexible configuration to support future evolving business process improvements
- Provide employees with easy to use intuitive system
- Meaningful metrics and flexible reporting



