

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:

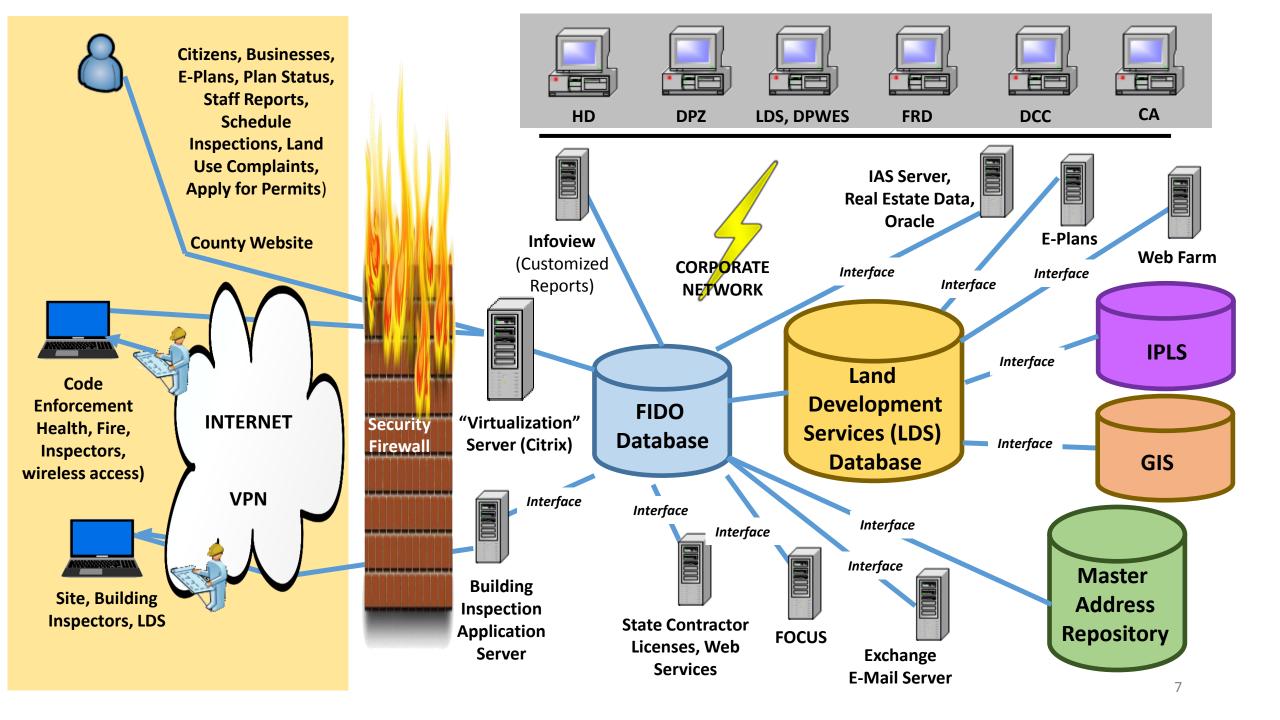
• 250,000 Inspections performed

• 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	✓	✓	✓	✓	✓	✓	✓				✓	✓		√
DPZ – Zoning Admin	~	~	✓	✓	✓	✓	✓	✓	✓	✓	~	✓		✓
DPZ - Planning	✓	✓	✓	✓	✓	✓	✓				✓	✓		✓
LDS – Intake	✓	✓			✓			✓			✓			✓
LDS – Site	✓	✓	✓	✓	✓	√	✓	✓	✓	√	✓	√	✓	✓
LDS – Buildings	✓	✓			✓	✓	~	✓	✓	✓	✓	✓	✓	✓
Dept. Code Compliance	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Health	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fire & Rescue	✓	✓			✓	√	✓	✓	✓	√	√	✓	✓	✓

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

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- 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



