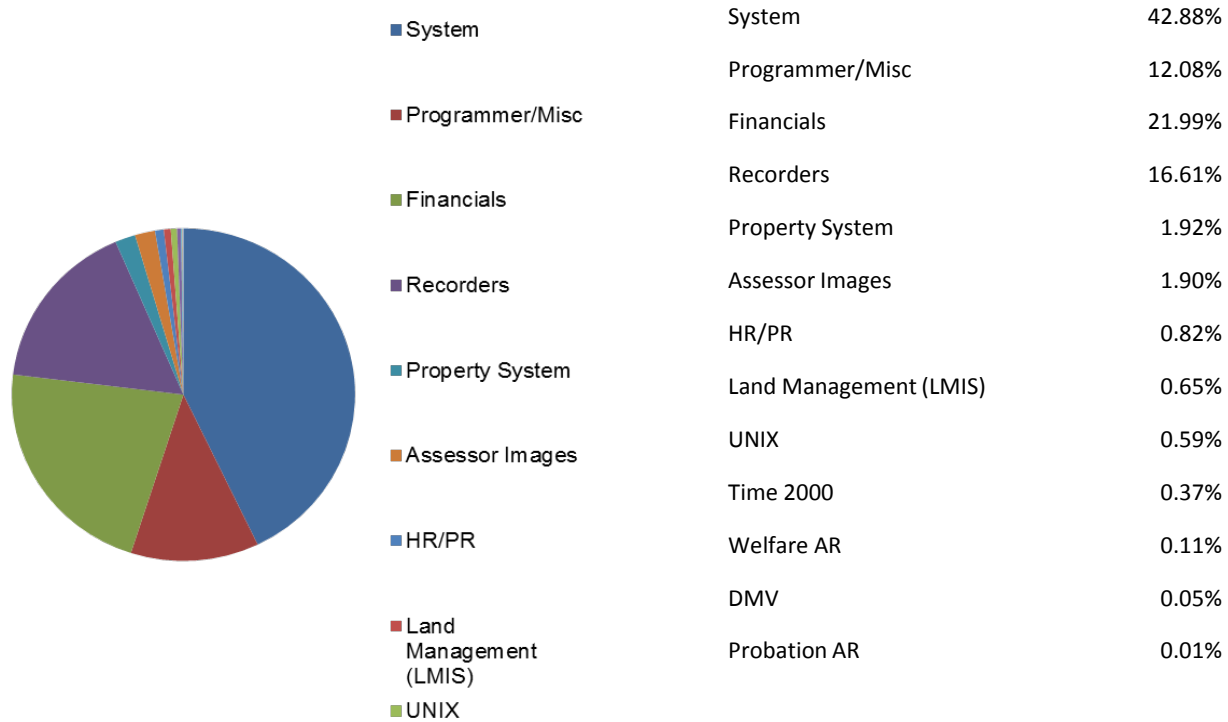# SYSTEMS MODERNIZATION MAINFRAME & LEGACY SYSTEMS OVERVIEW

WHERE ARE WE CURRENTLY?

- El Dorado County's mainframe environment consists of three major physical components:

  - Z9 Processor
    - Purchased February 2007
    - EOL (End of Life) June 2015

  - Data Storage Unit
    - Purchased May 2006
    - EOL December 2014

  - Tape Controller & Library
    - Purchased June 2009
    - EOL 2019 (Approx.)

APPLICATIONS RESIDING ON MAINFRAME

- ■ System
- ■ Programmer/Misc
- ■ Financials
- ■ Recorders
- ■ Property System
- ■ Assessor Images
- ■ HR/PR
- ■ Land Management (LMIS)
- ■ UNIX

Application	Percentage
System	42.88%
Programmer/Misc	12.08%
Financials	21.99%
Recorders	16.61%
Property System	1.92%
Assessor Images	1.90%
HR/PR	0.82%
Land Management (LMIS)	0.65%
UNIX	0.59%
Time 2000	0.37%
Welfare AR	0.11%
DMV	0.05%
Probation AR	0.01%

MAINFRAME ENVIRONMENT COST TODAY

- Hardware & IBM MLC Maintenance $150,000
- Third party Software License

  and Maintenance $460,000
  - Includes annual licensing for:
    - FAMIS
    - M204 (Property system)
    - Payroll, etc.
- Staff Cost $500,000
- **Current Annual Cost**   **$1,110,000**

IN-HOUSE VS. HOSTED 5-YEAR PLAN

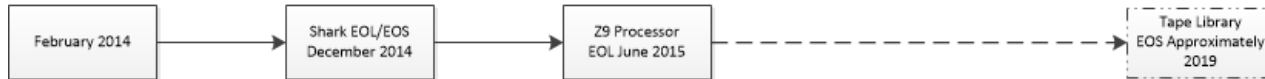| Infrastructure	Replacement of the Mainframe $486,455	Hosted Vendor 1	Hosted Vendor 2
One time transition cost	$45,000	$1.3 Million	TBD
Hardware Cost	One Time $386,000	$76,000 Monthly	$43,320 Monthly
5 year Hardware Maintenance	$55,455 (Discount price if paid at Purchase)	Included	Included
IBM MLC Fees	$22,305 Monthly	Included	Included
Additional Secure Connection	N/A	Approximately $2,300 Monthly	Approximately $2,300 Monthly
Total 5 year Cost of ownership	**$1,824,758**	**$5,998,000**	**$2,738,000 + TBD = Unknown**

ADDITIONAL MAINFRAME COSTS

○ Staffing:
- Based upon the requirements specified to vendors, cost remain the same for In-House or Hosted solution.

○ Third party software licensing
- In-House - $460,000 annual

- Hosted
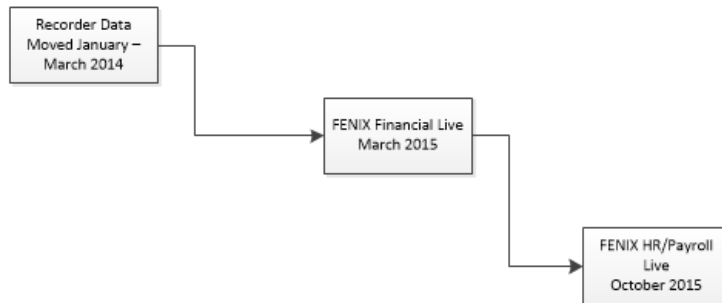 ○ Cost will vary depending on MIPS, shared environment, Mainframe series.

TIMELINE

Current Mainframe Hardware EOL

```
┌──────────────┐     ┌──────────────┐     ┌──────────────┐                    ┌──────────────┐
│ February 2014│ ──► │ Shark EOL/EOS│ ──► │ Z9 Processor │ ─ ─ ─ ─ ─ ─ ─ ─ ─► │ Tape Library │
│              │     │ December 2014│     │ EOL June 2015│                    │ EOS Approximately│
│              │     │              │     │              │                    │ 2019         │
└──────────────┘     └──────────────┘     └──────────────┘                    └──────────────┘
```

Current Data Migration

```
┌──────────────┐
│ Recorder Data│
│ Moved January –│
│ March 2014   │
└──────────────┘
        │
        └──────► ┌──────────────┐
                 │ FENIX Financial Live│
                 │ March 2015   │
                 └──────────────┘
                         │
                         └──────► ┌──────────────┐
                                  │ FENIX HR/Payroll│
                                  │ Live         │
                                  │ October 2015 │
                                  └──────────────┘
```

Proposed Data Migration

```
┌──────────────┐                                   ┌──────────────┐
│ Begin LMIS   │ ────────────────────────────────► │ Complete LMIS│
│ Replacement  │                                   │ Replacement  │
│ January 2014 │                                   │ January 2016 │
└──────────────┘                                   └──────────────┘
                                                           │
                                                           └──────► ┌──────────────┐
                                                                    │ Property System│
                                                                    │ Replacement  │
                                                                    │ 2018         │
                                                                    └──────────────┘
```

MAINFRAME MIGRATION PLAN

- FENIX
  - Financial Live March 2015
  - HR/Payroll Live October 2015
- LMIS
  - January 2014 – Begin Demos
  - Perform analysis and define functional requirements
  - Go through RFP Process
  - Select Vendor
  - Completion in 2016
- Property System
  - Complete transition to new system by 2019
- Be Completely off Mainframe in 5 years (2019)

RECOMMENDED ACTIONS

○ Approve budget transfer of $486,455 from General Fund Contingency to the Information Technologies Department budget

○ Authorize purchasing agent to award bid and issue purchase order to the lowest responsive, responsible bidder for the purchase new data storage unit and processor as part of the five year migration plan.

- One time transition cost $ 45,000
- Hardware Cost $386,000
- 5 year Hardware Maintenance $ 55,455

Total Cost = $486,455