COUNTY OF FREDERICK



Information Technologies (540) 665-561414

MEMORANDUM

TO: Board of Supervisors

FROM: Patrick Fly, Interim IT Director

DATE: February 9, 2016

RE: Board of Supervisors Information Technology Committee Report

The Board of Supervisors Information Technology Committee met in the First Floor Conference Room at 8:15am on Tuesday, February 9, 2016. All members were present with the exception of Citizen Representative Lorin Sutton

Items Requiring Board Action

1. None

Items NOT Requiring Board Action

- 1. Mr. Fly, Interim IT Director, presented the Committee with information regarding the virtualization 5 year refresh update for purposes of replacing end of life enterprise equipment, disaster recovery, expanded storage, development environment, and virtual desktop enterprise.
- 2. Ms. Nugent presented the Committee with information regarding the FY16-17 PC Refresh.
- 3. Mr. Fly presented the Committee with the Information Technologies FY16-17 budget requests.
- 4. Mr. Fly presented the Committee with the Information Technologies responsibilities regarding the Round Hill Fire Station Phone System
- 5. Mr. Fly presented the Committee with information from FEMA to update the 100 Year Flood Plan

There being no further business, the meeting was adjourned.

Information Technologies Committee

Gary Lofton, Chairman Robert Hess Judith McCann-Slaughter Quaiser Absar Lorin Sutton Todd Robertson

Interim IT Director

BOS Tech Committee

AGENDA

Date: Tuesday

February 9th, 2016

Time: 8:15 am

Purple Conference Room

107 N Kent Street

- Non-actionable Item: Virtualization Refresh Update
- Non-actionable Item: PC Refresh Update
- Non-actionable Item: Budget Request for FY16-17 Update
- Non-actionable Item: New Round Hill Fire Station Phone System Update
- Non-actionable Item: County FEMA Flood Maps Update



Virtualization Refresh

MAIN SITE											
	Role	Unit Count	Model	Processor	RAM/Memory	Storage	Network	Admin	Support	Server Price	Total Price
Compute	VM Hosts	8	FC630	2 x E5-2698 2.3ghz - 16C	16 x 16gb 256 GB	SD boot Mirror SD cards	NDC 2 x 10gb PCIe 2 x 10gb SFP+	iDRAC 8 Ent	3 Year Pro 24 x 7 x 4hrs	\$13,879	\$111,032
	Server Chassis	2	FX2 Chassis	n/a	n/a	n/a	2 x 410S SFP+ 4 x 10gb per switch	CMC	3 Year Pro 24 x 7 x 4hrs Installation	\$6,618	\$13,236
SAN Storage	SAN	1	Compellent 4020 with 2 x SC200	Dual Controllers	Dual Cache	72TB RAW 12 x 1.92TB SSD (RI) 24 x 2TB NLSAS	Dual 2 x 10gb SFP+	Storage Cntr Progression Installation Training	3 Year Pro 24 x 7 x 4hrs	\$72,845	\$72,845
	10gb SAN iSCSI Switch Cabling	2	N4064F	n/a	n/a	n/a	48 x 10gb SFP+ 2 x QSFP+ 13 SFP+ cables	Console OMNM	3 Year Pro 24 x 7 x 4hrs	\$8,929	\$17,858 \$0
Network	10ah Cara	0	7/2	-/-	-/-	n/a	NEED CDD, 40-b	n/a	n /a	\$0	\$0
Network	10gb Core LAN Switch	0	n/a	n/a	n/a	n/a	NEED SRP+ 10gb	n/a	n/a	\$0	\$0
	1gb Mngmt Switch	1	N3024	n/a	n/a	n/a	24 x 1gb 2 x 10gb SFP+	n/a	3 Year Pro 24 x 7 x 4hrs	\$1,752	\$1,752
Backup	Backup	1					TBD			\$0	\$0
Software	Windows Server	8	Windows 2012	DataCenter	n/a	n/a	n/a	n/a	n/a	\$4,544	\$36,352
	Windows	250	Windows	n/a	n/a	n/a	TBD	n/a	n/a	\$28	\$7,018
	Vmware	16	Vsphere 6	Per Socket	n/a	n/a	n/a	n/a	n/a	\$2,390	\$38,240
	Vsphere Vmware	16	Vsphere 6	Support	n/a	n/a	n/a	n/a	n/a	\$1,819	\$29,104
VDI	Vsphere Vmware	1	Enterprise Horizon	100 user	n/a	n/a	n/a	n/a	n/a	\$20,050	\$20,050
Software	Horizon Vmware	1	Standard Horizon	pack 100 User	n/a	n/a	n/a	n/a	n/a	\$15,796	\$15,796
	Horizon	100	Standard	Support							
	Windows Server	100	RDS CAL 2012	n/a	n/a	n/a	n/a	n/a	n/a	\$97	\$9,728
	Windows VLA	100	Windows Ent	n/a	n/a	n/a	n/a	n/a	n/a	\$234	\$23,386
Total	n/a	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$0	\$0 \$396,397
Total											\$330,331
DR Site											
	Role	Unit Count	Model	Processor	RAM/Memory	Storage	Network	Admin	Support	Server Price	Total Price
Compute	VM Hosts	3	FC630	2 x E5-2698 2.3ghz - 16C	16 x 16gb 256 GB	SD boot Mirror SD cards	NDC 2 x 10gb PCIe 2 x 10gb SFP+	iDRAC 8 Ent	3 Year Pro 24 x 7 x 4hrs	\$13,879	\$41,637
	Server Chassis	1	FX2 Chassis	n/a	n/a	n/a	2 x 410S SFP+ 4 x 10gb per switch	CMC	3 Year Pro 24 x 7 x 4hrs Installation	\$6,618	\$6,618
SAN Storage	SAN	1	Compellent 4020 with 2 x SC200	Dual Controllers	Dual Cache	60TB RAW 6 x 1.92TB SSD (RI) 24 x 2TB NLSAS	Dual 2 x 10gb SFP+	Storage Cntr Progression Replication Installation	3 Year Pro 24 x 7 x 4hrs	\$52,823	\$52,823
	10gb SAN iSCSI Switch	2	N4032F	n/a	n/a	n/a	24 x 10gb SFP+ 2 x QSFP+	Console OMNM	3 Year Pro 24 x 7 x 4hrs	\$6,129	\$12,258
	Cabling						13 SFP+ cables	OWNER	24 / / / 41113	\$0	\$0
Network	10gb Core LAN Switch	0	n/a	n/a	n/a	n/a	NEED SRP+ 10gb	n/a	n/a	\$0	\$0
	1gb Mngmt Switch	1	N3024	n/a	n/a	n/a	24 x 1gb 2 x 10gb SFP+	n/a	3 Year Pro 24 x 7 x 4hrs	\$1,752	\$1,752
Backup	Backup	1					TBD		24 X 7 X 41113	\$0	\$0
Software	Windows	3	Windows	DataCenter	n/a	n/a	n/a	n/a	n/a	\$4,544	\$13,632
	Server Windows	0	Windows	n/a	n/a	n/a	TBD	n/a	n/a	\$28	\$0
	Vmware	6	Vsphere 6	Per Socket	n/a	n/a	n/a	n/a	n/a	\$2,575	\$15,450
	Vsphere Vmware	6	Enterprise Vsphere 6	Support	n/a	n/a	n/a	n/a	n/a	\$1,875	\$11,250
	Vsphere		Enterprise								

Virtualization Refresh

MAIN SITE						_					
	Role	Unit Count	Model	Processor	RAM/Memory	Storage	Network	Admin	Support	Server Price	Total Price
Compute	VM Hosts	8	FC630	2 x E5-2698 2.3ghz - 16C	16 x 16gb 256 GB	SD boot Mirror SD cards	NDC 2x 10gb PCle 2x 10gb SFP+	IDRAC 8 Ent	3 Year Pro 24 x 7 x 4hrs	\$13,879	\$111,033
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	10gb SAN iSCSI Switch	2	N4064F	n/a	n/a	n/a	48 x 10gb SFP+ 2 x QSFP+ 13 SFP+ cables	Console OMNM	3 Year Pro 24 x 7 x 4hrs	\$8,929 \$0	\$17,858 \$0
	Cabling						15 SEPT CableS			ŞU	
Network.	10gb Core LAN Switch	0	n/a	n/a	n/a	n/a	NEED SRP+10gb	n/a	n/a	ŚO	\$0
	1gb Mingrnt Switch	1	N3024	n/a	n/a	n/a	24 x 1gb 2 x 10gb SFP+	n/a	3 Year Pro 24 x 7 x 4hrs	\$1,752	\$1,75
Backup	Backup	1					TBD			\$0	\$0
Software	Windows Server	8	Windows 2012	DataCenter	n/a	n/a	n/a	n/a	n/a	\$4,544	\$36,352
	Windows Server	250	Windows 2012 CALs	n/a	n/a	n/a	TBD	n/a	n/a	\$28	\$7 , 018
	Vmware Vsphere	16	Vsphere 6 Enterprise	PerSocket	n/a	n/a	n/a	n/a	n/a	\$2,390	\$38,240
	Vmware Vsphere	16	Vsphere 6 Enterprise	Support	n/a	n/a	n/a	n/a	n/a	\$1,819	\$29,104
VDI Software	Vmware Horizon	1	Horizon Standard	100 user pack	n/a	n/a	n/a	n/a	n/a	\$20,050	\$20,050
	Vmware	1	Horizon	100 User	n/a	n/a	n/a	n/a	n/a	\$15,796	\$15,796
	Horizon Windows Server	100	Standard RDS CAL 2012	Support n/a	n/a	n/a	n/a	n/a	n/a	\$ 97	\$9,728
	Windows	100	Windows Ent	n/a	n/a	n/a	n/a	n/a	n/a	\$234	\$23,386
	n/a	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	\$0	\$0
Total											\$396,397
DR Site											
	Role	Unit Count	Model	Processor	RAM/Memory	Storage	Network	Admin	Support	Server Price	Total Price
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	10gb SAN iSCSI Switch Cabling	2	N4032F	n/a	n/a	n/a	24 x 10gb SFP+ 2 x QSFP+ 13 SFP+ cables	Console OMNM	3 Year Pro 24 x 7 x 4hrs	\$6, 1 29 \$0	\$12,258 \$0
Network	10gb Core	0	n/a	n/a	n/a	n/a	NEED SRP+10gb	n/a	n/a	\$0	Śū
	LAN Switch	1	N3024	n/a	n/a		24 x 1gb	n/a	3 Year Pro	\$1,752	\$1,752
	1gb Mingret Switch		143024	ii) a	iņa	n/a	2 x 10gb SFP+	ा ए स	24 x 7 x 4hrs		
Backup	Backup	1					TBD			\$0	\$0
Software	Windows Server	3	Windows 2012	DataCenter	n/a	n/a	n/a	n/a	n/a	\$4,544	\$13,632
	Windows Server	0	Windows 2012 CALs	n/a	n/a	n/a	TBD	n/a	n/a	\$28	\$0
	Vmware Vsphere	6	Vsphere 6 Enterprise	PerSocket	n/a	n/a	n/a	n/a	n/a	\$2,575	\$15,450
	Vmware Vsphere	6	Vsphere 6 Enterprise	Support	n/a	n/a	n/a	n/a	n/a	\$1,875	\$11,250
Total			<u> </u>								\$155,420

Refresh for FY 2015-2016

Department	PCs	Laptops	GIS PCs	Total # units
Airport	5	1		6
Commissioner of Revenue			1	1
Reassessment				0
EDA	3			3
Treasurer	4			4
Planning	2			2
HR		1		1
Inspections		1		1
Public Works		2		2
Finance	1			1
Administration	3			3
BOS	1			1
IT	8	1	3	12
MIS	1			1
Commonwealth Attorney	6	1		7
LandFill	1	1		2
Dispatch	1			1
Fire and Rescue	1			1
Maintenance		1		1
Sheriff	2	3		5
Totals:	39	12	4	55

All PCs have been distributed to departments as of 1/11/2016

Purposed Refresh for FY 2016-2017

Department	PCs	Laptops	GIS PCs	Total # units
Airport	2			2
Commissioner of Revenue	9			9
Reassessment				0
EDA	1	1	1	3
Treasurer	1		1	2
Planning	4			4
HR	1			1
Inspections				0
Public Works	1	1		2
Finance	6			6
Administration	1			1
BOS				0
IT		1		1
MIS			2	2
Parks and Rec	1	1		2
Voter Registration	3			3
Commonwealth Attorney	7			7
LandFill				0
Dispatch	5			5
Fire and Rescue	3			3
Maintenance				0
Sheriff	11		1	12
NRADC	1			1
Totals:	57	4	5	66

Budget Request FY16-17 Update

005-000-000	Maintenance Service Contract Network				
	Phone Service Support/Equipment	40,000.00	45,000.00	(5,000.00)	Maintenance cost increase
	Anti-Virus Micro Trend	1,500.00	5,000.00	(3,500.00)	Budgeted for full enterprise cost as opposed to partial cost as done previously
	GFI	2,000.00	5,460.00	(3,460.00)	Budgeted for full enterprise cost as opposed to partial cost as done previously
	Exchange 2010	2,500.00	5,000.00	(2,500.00)	Budgeted for full enterprise cost as opposed to partial cost as done previously
	Spam-Titan	2,200.00	3,000.00	(800.00)	Maintenance cost increase
	SmartNet	5,200.00	8,500.00	(3,300.00)	Maintenance cost increase
	Appassure	9,174.00	30,000.00	(20,826.00)	Maintenance cost increase due to growing environment
	Iprism	3,500.00	8,600.00	(5,100.00)	Budgeted for full enterprise cost as opposed to partial cost as done previously
	Domain Reg frederick.va.us	800.00	1,000.00	(200.00)	Maintenance cost increase
	Dell Servcer Maintenance	4,500.00	8,500.00	(4,000.00)	Maintenance cost increase
	Singlewire Paging System	0.00	7,000.00	(7,000.00)	Had 14-15 Didn't Renew 15-16 do to changes in Software need to Buy 16-17
	Splunk Call Manage Reporting	0.00	18,500.00	(18,500.00)	New Request, Track Down Calls
	Jamf - Ipads	0.00	540.00	(540.00)	Purchased in previous years, first time support renewal
	Bridge Console	0.00	750.00	(750.00)	Purchased in previous years, first time support renewal
	CBT Nugets	0.00	2,400.00	(2,400.00)	was in 3002-000-000 in 15-16
	AD Self Service	0.00	1,794.00	(1,794.00)	Purchased in previous years, first time support renewal
	Backup Exec	3,500.00	4,000.00	(500.00)	Maintenance cost increase
tal:		74,874.00	155,044.00	(80,170.00)	
05-000-002	Maintenance Service Contracts GIS				
	ESRI Enterprise	50,000.00	50,000.00	0.00	
	Pictometry	34,000.00	34,000.00	0.00	
	Laserfiche	30,000.00	35,000.00	(5,000.00)	Maintenance cost increase
	Cryptzone	1,000.00	1,000.00	0.00	
	Geodocs	3,500.00	3,500.00	0.00	
	Freeance	2,000.00	2,000.00	0.00	
	Bomgar	1,400.00	1,600.00	(200.00)	Maintenance cost increase
	Kace	2,000.00	5,000.00	(3,000.00)	Maintenance cost increase
otal:		123,900.00	132,100.00	(8,200.00)	
			102/100:00	(0)200.007	
007-000-000	Integrated Technology Equipment				
	Server & Virtual Environment 5 yr refresh	0.00	111,000.00	(111,000.00)	5 Year Server & Virtual environment refresh - 5 yr lease for total of \$555,000
	PC Refresh	0.00	73,290.00	(111,000.00)	5 year PC replacement program this money is distributed to
	i e neirean		73,230.00		apporpriate individual dept. line items.
					apporpriate marvidual dept. line items.
atrick Fly, Interim I	T Director 2/19/2016				

U.S. Department of Homeland Security

Region III One Independence Mall, Sixth Floor 615 Chestnut Street Philadelphia, PA 19106-4404



January 6, 2016

Mr. Charles DeHaven, Jr. Chairman- At-Large, Board of Supervisors Frederick County 107 North Kent Street Winchester, VA 22601 Community: Frederick County,

Virginia

And Incorporated Areas

CID: 510063

Re: Flood Risk Study for Frederick County

Dear Mr. DeHaven:

Recently the Federal Emergency Management Agency (FEMA) held Flood Risk Discovery meetings in your watershed area to determine the extent of floodplain mapping needs within your community. As a result of the information gathered and through close contact with Patrick Fly, Frederick County GIS Manager, it was determined Frederick County was in need of countywide mapping updates. FEMA was able to initiate a flood risk study update for your community with 2015 funding.

The floodplain study, scheduled for completion within the next 12 to 18 months, will result in updates to the Flood Insurance Rate Maps and Flood Insurance Study for Frederick County. This revised study will provide technical floodplain information on all Zone A streams to aid in establishing actuarial flood insurance rates (rates which will reflect flood risk) and will provide a basis for your community's floodplain management program. FEMA appreciates your community's cooperation during the course of this study effort.

We ask that you disseminate information about this study within the community so that interested persons will have the opportunity to bring relevant data to your attention for submittal to our study contractor. This cooperation will enable our study contractor to consider local problems and concerns and to incorporate locally available information where applicable.

If you have any questions, concerns, or comments regarding this letter or the study process, please feel free to contact me at the above address or by telephone at (215) 931-5650.

Sincerely,

Bob Pierson Regional Project Monitor Risk Analysis Branch, Mitigation Division Mr. Dehaven January 6, 2016 Page 2

cc: Brenda Graton, County Administrator, Frederick County Patrick Fly, GIS Manager, Frederick County