

APPENDIX A

An analysis was conducted April 2017 – January 2018 at all 16 PPLD locations (14 library locations) to map, take inventory, and collect usage on all print technology including:

- Copiers
- Printers
- Fax Machines
- Scanners

The analysis includes PPLD supply cost and TCO for each device model across the fleet. This report provide an overview of the asset deployment, usage patterns, and a true cost breakdown for PPLDs print environment for consideration in RFP response.

Data collected does not include projected location for MFD at new library in Calhan, CO. PPLD will identify MFD to support this location during contract negotiations with winning bidder.

GLOSSARY AND DEFINITIONS

Redeploy	A recommendation to move the placement of this device from its current location, whether to another locale in the same library or to another library altogether
Refresh	A recommendation to replace due to age/usage or to reconsider the placement of devices
Retain	This device is of appropriate age, use, and location
Retire	A recommendation to remove this device from service due to disuse

USAGE ANALYSIS SUMMARY

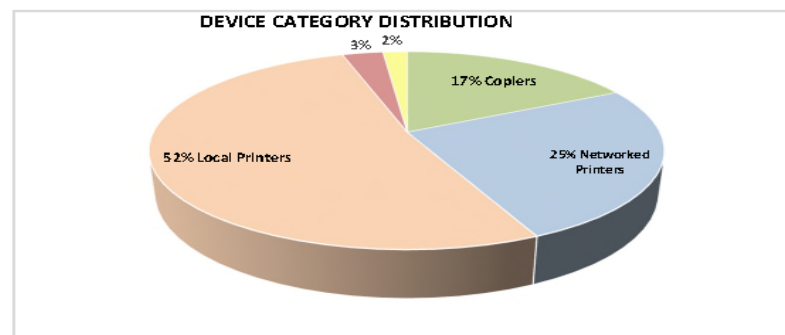
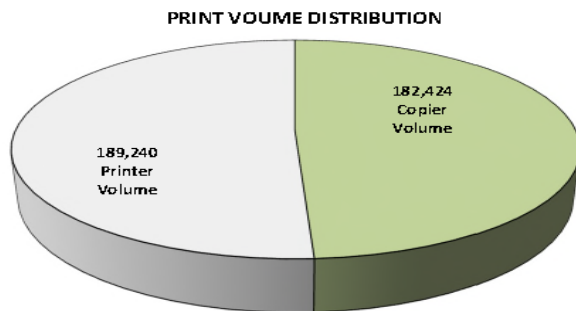


*Volume totals have been calculated on a 9 month average: 04/2017 thru 01/2018

CATEGORY TOTALS	MONTHLY AVG				
	DEVICE QUANTITY	DEVICE CATEGORY	B/W	COLOR	% OF FLEET VOLUME
	10	Scanners			
	29	MFD	95,708	86,716	49.08%
	42	Network Laser Printer	112,712	37,446	40.40%
	86	Local Laser Printer	28,057	10,412	10.35%
	5	Ink Jet Printer		532	0.14%
	3	Fax	81	NA	0.00%

FLEET TOTALS	DEVICE QUANTITY	DEVICE CATEGORY	B/W	COLOR	TOTAL
	175	ALL OUTPUT DEVICES	236,558	135,106	371,664

FLEET STATISTICS	STATISTICS
	36% OF THE PRINT FLEET REPORTS ON THE NETWORK
	61 DIFFERENT TONER MODELS TO SUPPORT THE CURRENT FLEET
	29 DIFFERENT PRINTER MODELS IN FLEET
	51 PRINTERS, PRINT LESS THAN 200 PAGES PER MONTH
	14 PRINTERS HAVE A LIFE COUNT GREATER THAN 200K
	23% OF DESKTOP PRINTERS ARE COLOR MODELS
	6 COPIERS HAVE A LIFE COUNT GREATER THAN 500K
	25 COPIERS DEPLOYED LONGER THAN 5 YEARS

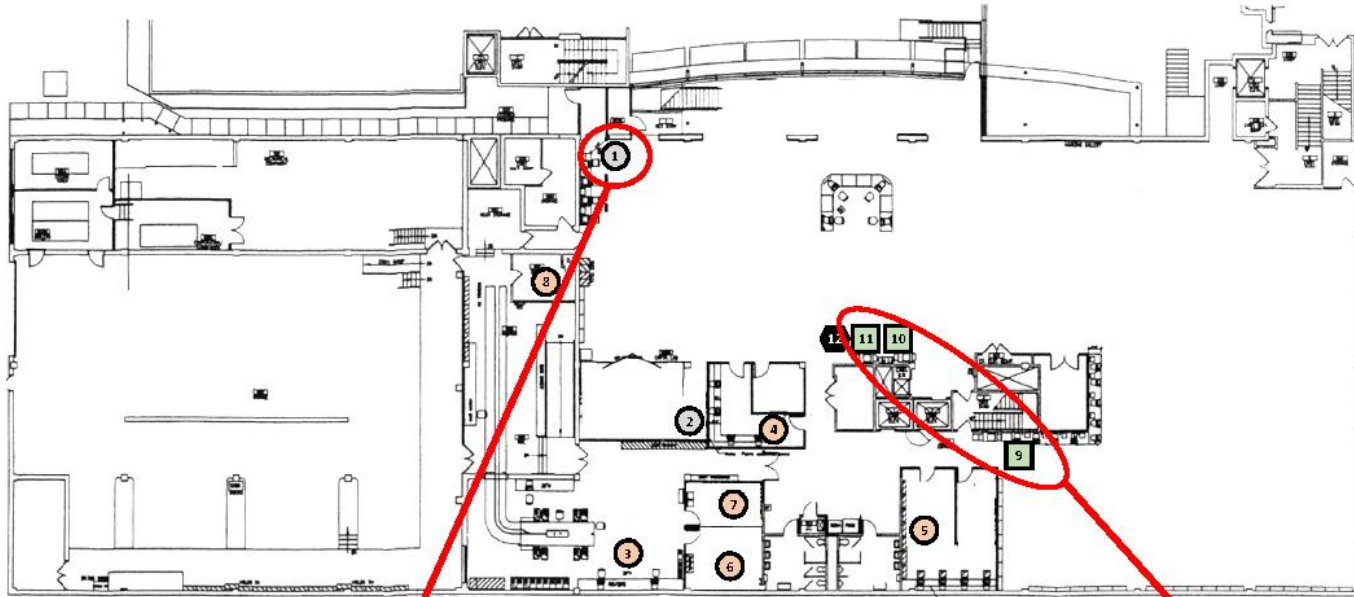








PIKES PEAK LIBRARY DISTRICT									
MAKE	MODEL	LOCATION	Device Type	1ST METER April 2017		2ND METER Sept 2017		MONTHLY USAGE	
				B/W	COLOR	B/W	COLOR	B/W	COLOR
SHARP	MX3100N	PE Basement Staff Copier	Copier	203,696	19,661	207,998	20,341	1,076	170
SHARP	MX2600N	PE Basement Patron Ref	Copier			88,759	3,898	22,190	975
SHARP	MX2600N	PE Basement Patron Ref	Copier	132,045	4,970	139,274	5,236	1,807	67
Sharp	MX2600N	PE Special Collections Geneology-Shared	Copier	89,541	2,102	93,121	2,255	895	38
Sharp	MX2600-N	PE Spec Collect Main Level-Shared	Copier	56,942	3,737	60,397	3,840	864	26
Sharp	MX3100N	PE ML Patron Copier	Copier	148,329	5,919	161,187	6,298	3,215	95
Sharp	MF3100n	Penrose Staff Copier	Copier	121,094	100,048	124,863	104,142	942	1,024
Lexmark	E340	PE Billing Desk	Copier	34,484		35,661		294	0
Konica	C454e	PE Chief Librarian's Office	Copier	0	0	315,173	291,273	78,793	72,818
Sharp	3100N	KCH Main Level Copier	Copier			208,402	89,730	52,101	22,433
Sharp	MX-3100	CH Copier	Copier	323,388	47,980	339,478	56,398	4,023	2,105
Sharp	MX-3100n	SA Patron Copier	Copier	436,241	116,468	463,334	131,111	6,773	3,661
Sharp	MX3100N	RO Patron Copier	Copier	139,400	57,747	148,037	66,088	2,159	2,085
Sharp	MX3100N	HO Patron Copier	Copier	375,709	104,698	391,673	127,382	3,991	5,671
Sharp	MX3100N	FO Patron Copier	Copier	177,457	55,334	184,898	65,766	1,860	2,608
Sharp	MX3100N	HI Patron Copier	Copier	134,133	116,508	138,768	123,617	1,159	1,777
Sharp	MX3100N	MO Patron Copier	Copier	172,869	75,490	183,058	81,191	2,547	1,425
Sharp	MX2600	PA Shared Copier	Copier	33,753	40,723	34,736	42,329	246	402
Sharp	MX2600n	MA Main Copier	Copier	157,836	47,005	169,936	52,967	3,025	1,491
Sharp	Mx2600n	UT Shared Copier	Copier			24,307	13,833	6,077	3,458
Sharp	MX3100N	OL 1st Floor	Copier	133,284	37,207	139,649	41,966	1,591	1,190
Sharp	MX3100N	21c HR	Copier	192,665	178,876	75,724			
Sharp	MX6201	21c Finance Copy Rm	Copier	899,758	210,466	918,418	217,785	4,665	1,830
Sharp	MX3100N	21c Staff Hallway	Copier			46,162		11,541	0
Sharp	MX3100N	EA Patron MFP	Copier	236,141	34,948	271,285	37,327	8,786	595
Sharp	MX2600N	EA Childrens Staff	Copier	220,659	97,344	224,561	110,897	976	3,388
Sharp	mx2600n	EA Switchboard Rm	Copier	167,944	20,207	176,036	22,431	2,023	556
Sharp	MX3100N	EA Patron Copier	Copier	152,835	10,295	156,475	10,860	910	141
Sharp	MX6201N	EA Basement copier	Copier	714,192	342,201	723,077	348,772	2,221	1,643

****Staff only: Blue, Patron only: Green, Shared Staff/Patron: Gold**

*21c HR printer meter reset mid-year, we are not able to provide an estimate for its monthly usage

Penrose Branch – Lower Level



-  = MFD
-  = Network Laser Printer
-  = Local Laser Printer
-  = Ink Jet Printer
-  = Fax
-  = Scanner

Refresh
This device prints 66% of volume at this location. \$528 cost of operation.

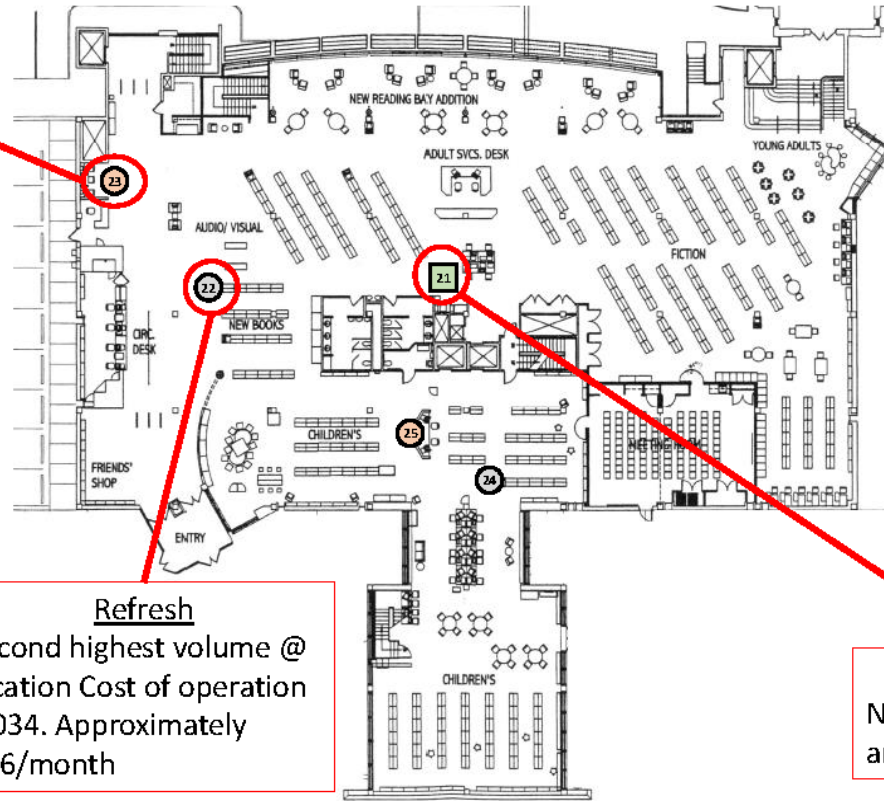
Retire/Refresh
Under utilized
3 copiers have a combined volume of 3,365.

	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
1	HP	CP4025	Penrose LL	Basement Patron	JPDCH2Q0WT	10.110.100.19	14,677	3,817	Refresh
2	HP	CP4025	Penrose LL	Basement Gates Lot	JPDCH2Q0VP	10.110.100.18	1,859	502	Retain
3	HP	P1606DN	Penrose LL	Basement Reference	VNB3G69492	Local	1,361		Refresh
4	HP	P1606DN	Penrose LL	Basement Telephone Rm	VND3B41823	Local	542		Refresh
5	HP	P1606DN	Penrose LL	Basement Shelving/Circulation	VNB3B67303	Local	901		Refresh
6	HP	P1606DN	Penrose LL	Basement Mobile Library	VND3G07359	Local	606		Refresh
7	HP	P1606DN	Penrose LL	Basement Lisa Wards Office	VNB3B67279	Local	377		Refresh
8	HP	P1606DN	Penrose LL	Basement Facility Office	VND3F63870	Local	208		Refresh
9	SHARP	MX3100N	Penrose LL	Basement Staff Copier	9504926800	Local	1,104	128	Refresh
10	SHARP	MX2600N	Penrose LL	Basement Patron Ref	8507736600	Local	574	56	Refresh
11	SHARP	MX2600N	Penrose LL	Basement Patron Ref	8511756600	Local	1,438	65	Refresh
12	Envision	Scanner	Penrose LL						Retain
13	HP	P1606DN	Penrose LL	Basement Study Commons	VNB3G25868	Local	5		Retire

B/W_Color	Device Category	B/W	Color	% of Vol
0_3	MFD	3,116	249	11.92%
0_2	Network Laser Printer	16,536	4,319	73.90%
7_0	Local Laser Printer	4,001		14.18%
1	Scanner			

28,222

Penrose Branch – Main Level



Refresh
 \$245 cost of operation. 1,229 pgs. in color

Refresh
 Second highest volume @ location Cost of operation \$.034. Approximately \$76/month

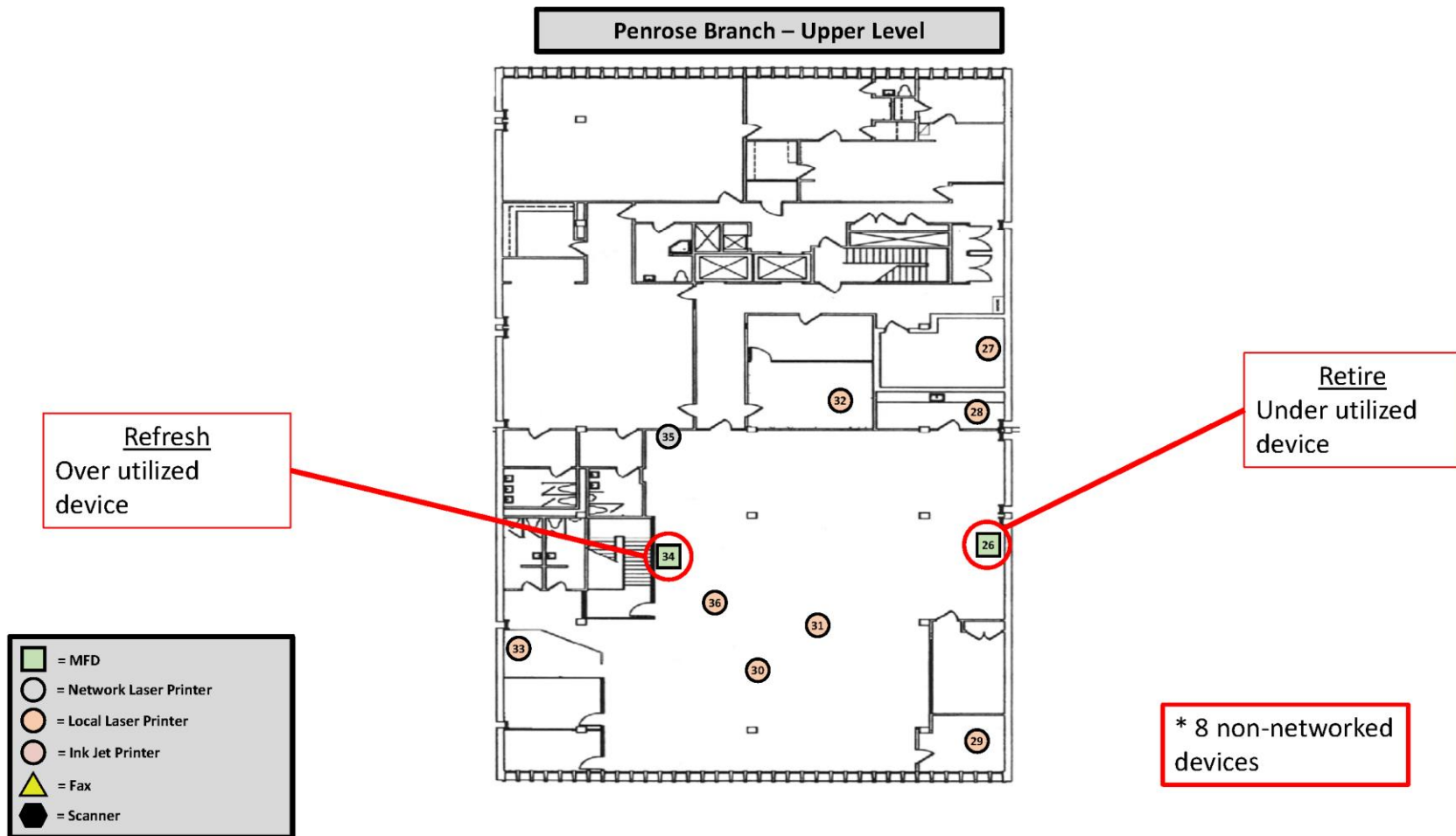
Refresh
 Non-Networked and low volume

- = MFD
- = Network Laser Printer
- = Local Laser Printer
- = Ink Jet Printer
- = Fax
- = Scanner

	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
21	Sharp	MX3100N	Penrose ML	ML Patron Copier	9504965800	Local	2,346	105	Refresh
22	HP	P1606DN	Penrose ML	ML-Ask Desk	VNB3G26635	10.110.100.15	2,244		Refresh
23	HP	M277dw	Penrose ML	Security Desk	VNB8H6Q6VK	Local	51	1,229	Refresh
24	HP	P4014	Penrose ML	Childrens Patron Printer	CNDX226516	10.110.50.37	414		Retain
25	HP	2600n	Penrose ML	Childrens Ref. Desk	CNHC7212M0	Local	1,523	207	Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	2,346	105	30.19%
2_0	Network Laser Printer	2,657	0	32.73%
0_2	Local Laser Printer	1,574	1,437	37.08%
0	Scanner			

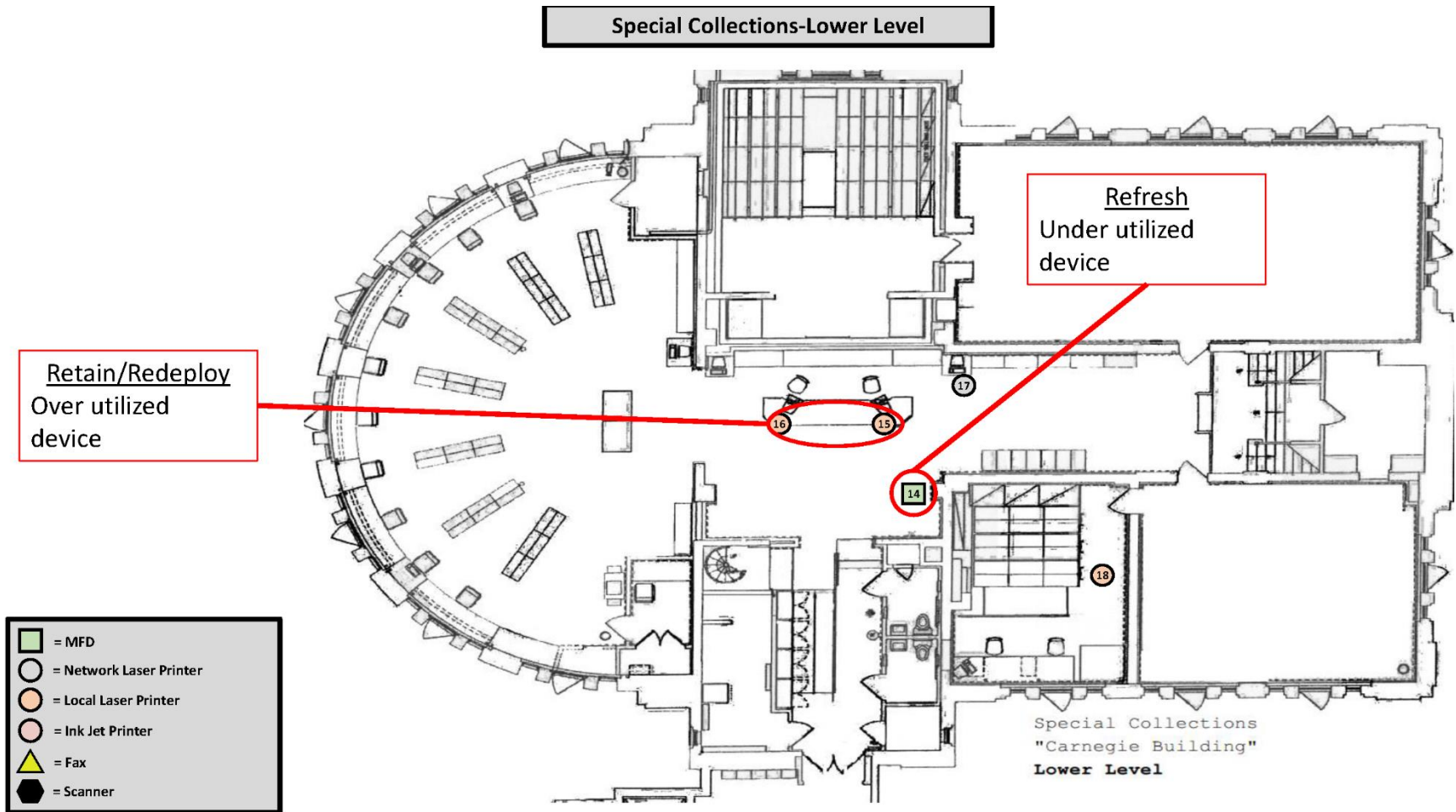
8,119



	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
26	Sharp	MX3100n	Penrose UL	Penrose Upper	9504944800	10.110.100.14	772	1,092	Retire
27	HP	P1606DN	Penrose UL	Chief Librarian Office	VND3F48583	Local	50		Refresh
28	HP	P1606DN	Penrose UL	Barb Office	VNB3G69485	Local	125		Refresh
29	HP	P1606DN	Penrose UL	Nancy Maday's Office	VND3F55343	Local	150		Refresh
30	HP	P1606DN	Penrose UL	Erin Barus	VNB3M14397	Local	301		Retire
31	HP	M251nw	Penrose UL	Melanie W	CNBFH06819	Local	45	51	Retire
32	HP	1100	Penrose UL	Tim Blevins Office	USBH012002	Local	0		Retire
33	HP	P1606DN	Penrose UL	Sherenna's Desk	VND3F63867	Local	135		Refresh
34	Konica	C454e	Penrose UL	Penrose Upper	A5C0011010048	10.110.100.250	39,085	36,950	Refresh
35	HP	M601	Penrose UL	Staff Printer	CNBCD4D518	10.110.100.17	759		Retain
36	Lexmark	E250D	Penrose UL	Security Printer -NO CONFIG	NA	Local	50		Retire

B/W_Color	Device Category	B/W	Color	% of Vol
0_2	MFD	39,857	38,043	97.91%
1_0	Network Laser Printer	759	0	0.95%
1_7	Local Laser Printer	855	51	1.14%
0	Scanner			

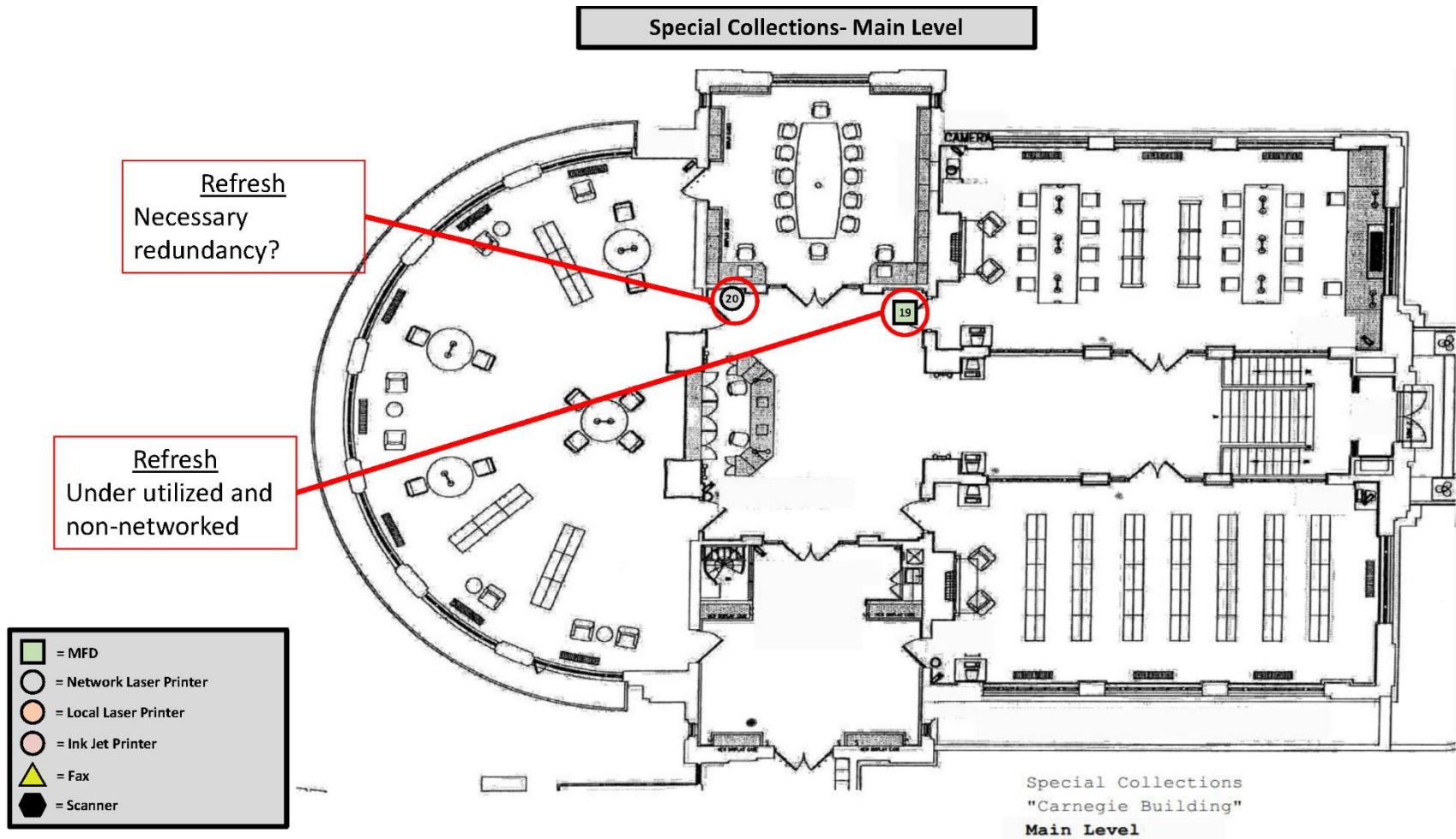
79,564



	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
14	Sharp	MX2600N	Spec Coll LL	Speciall Collections Geneology	8508045600	Local	855	25	Refresh
15	HP	1100	Spec Coll LL	Special Collection LL	USGH040052	Local	50		Redeploy
16	HP	1100	Spec Coll LL	Special Collection LL	USGH040035	Local	50		Retain
17	HP	4015	Spec Coll LL	Special Collection LL-Patron Printer	CNDYC62586	10.110.100.20	3,298		Retain
18	Lexmark	E250D	Spec Coll LL	Spec Collect LL-Staff Area	620YPH8	Local	50		Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	855	25	20.34%
1_0	Network Laser Printer	3,298	0	76.20%
3_0	Local Laser Printer	150	0	3.47%
0	Scanner			

4,328

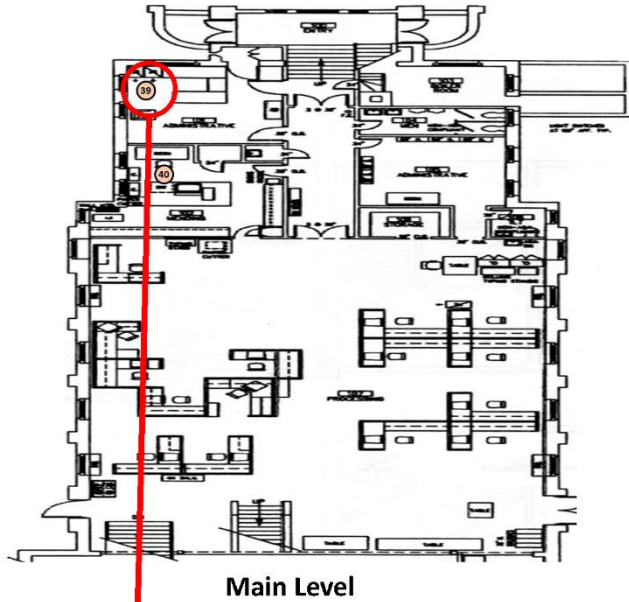


	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
19	Sharp	MX2600-N	Spec Coll ML	Spec Collect Main Level	8507284900	Local	630	16	Refresh
20	HP	P1606DN	Spec Coll ML	Regional History Desk	VND3G07354	10.110.100.21	1,309		Refresh

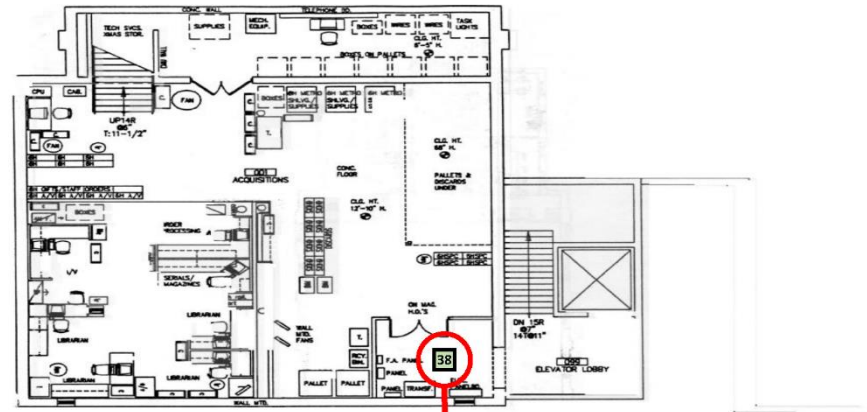
B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	630	16	33.04%
1_0	Network Laser Printer	1,309	0	66.96%
0	Local Laser Printer	0	0	0.00%
0	Scanner			

1,955

Knights Of Columbus



Possibly uncaptured toner cost. Usage estimates 14 cartridges per month.



- = MFD
- = Network Laser Printer
- = Local Laser Printer
- = Ink Jet Printer
- = Fax
- = Scanner

Refresh
Over utilized device

	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
37	HP	P1606DN	Knights of Columbus	Speciall Collections	VND3C29108	Local	1,334		Refresh
38	Sharp	3100N	Knights of Columbus	Main Level Copier	9504853800	10.110.200.20	1,515	10,162	Refresh
39	HP	CP1518ni	Knights of Columbus	Julie Beck Adult Ed	CNCC8CC10Y	Local	94	5,037	Refresh
40	HP	P1606DN	Knights of Columbus	Teona's Office	VNB3M12924	Local	20		Refresh







B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	1,515	10,162	64.29%
0	Network Laser Printer			
2_1	Local Laser Printer	1,448	5,037	35.71%
0	Scanner			

18,162

Cheyenne Mountain Library



Refresh
Consolidate
devices

-  = MFD
-  = Network Laser Printer
-  = Local Laser Printer
-  = Ink Jet Printer
-  = Fax
-  = Scanner

	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
41	HP	P1606DN	Cheyenne Mtn	International Desk	VNB3G25863	Local	1,081		Refresh
42	Sharp	MX-3100	Cheyenne Mtn	Copier	9504865800	10.40.200.20	3,592	1,778	Retain
43	HP	M601	Cheyenne Mtn	Patron Printer	CNCCFD40KY	10.40.100.10	12,100		Redeploy
44	Lexmark	E340	Cheyenne Mtn	Manager Printer	72B65H3	Local	106		Refresh
45	HP	P1606DN	Cheyenne Mtn	Work Room	VND3F48582	Local	590		Refresh
46	HP	P1606DN	Cheyenne Mtn	Ceciles Office	VNB3B67302	Local	304		Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	3,592	1,778	27.47%
1	Network Laser Printer	12,100	0	61.89%
4_0	Local Laser Printer	2,080	0	10.64%
0	Scanner			

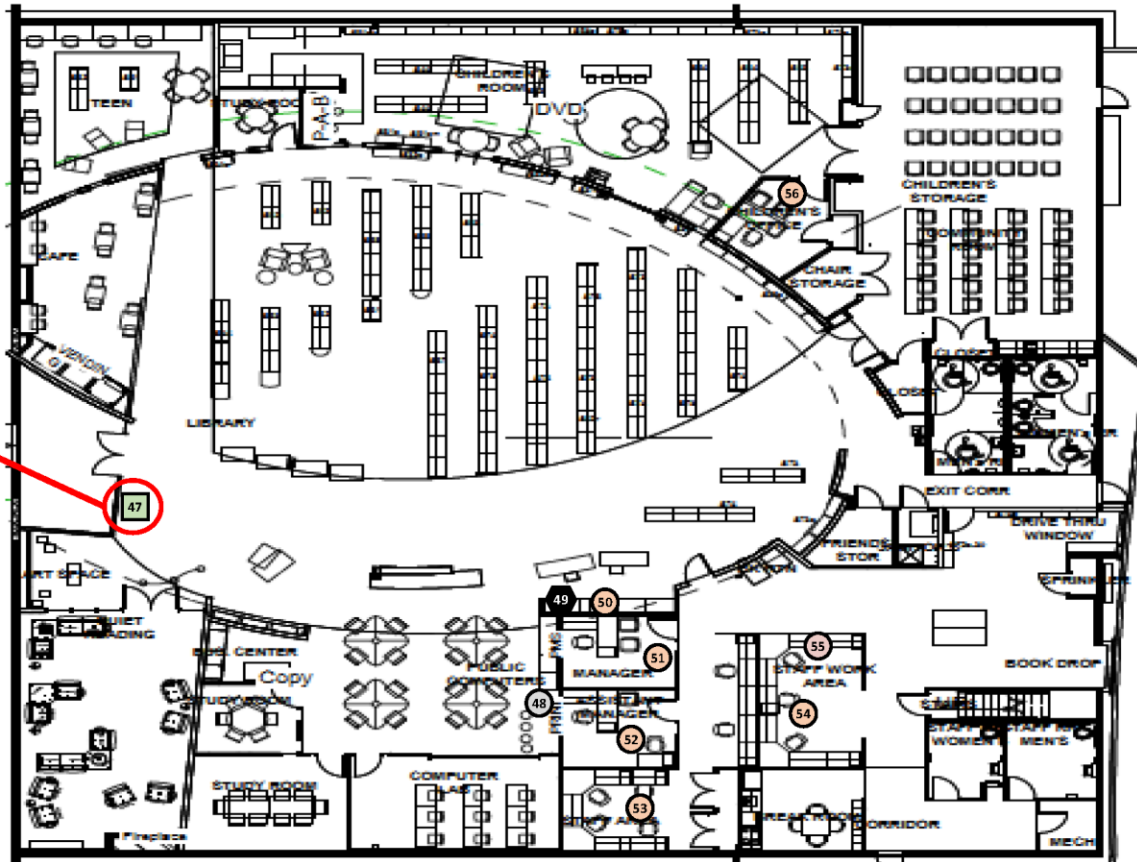
19,551

Sand Creek Library

* 5 different printer models at this location

Refresh
Good usage but this is an aged device

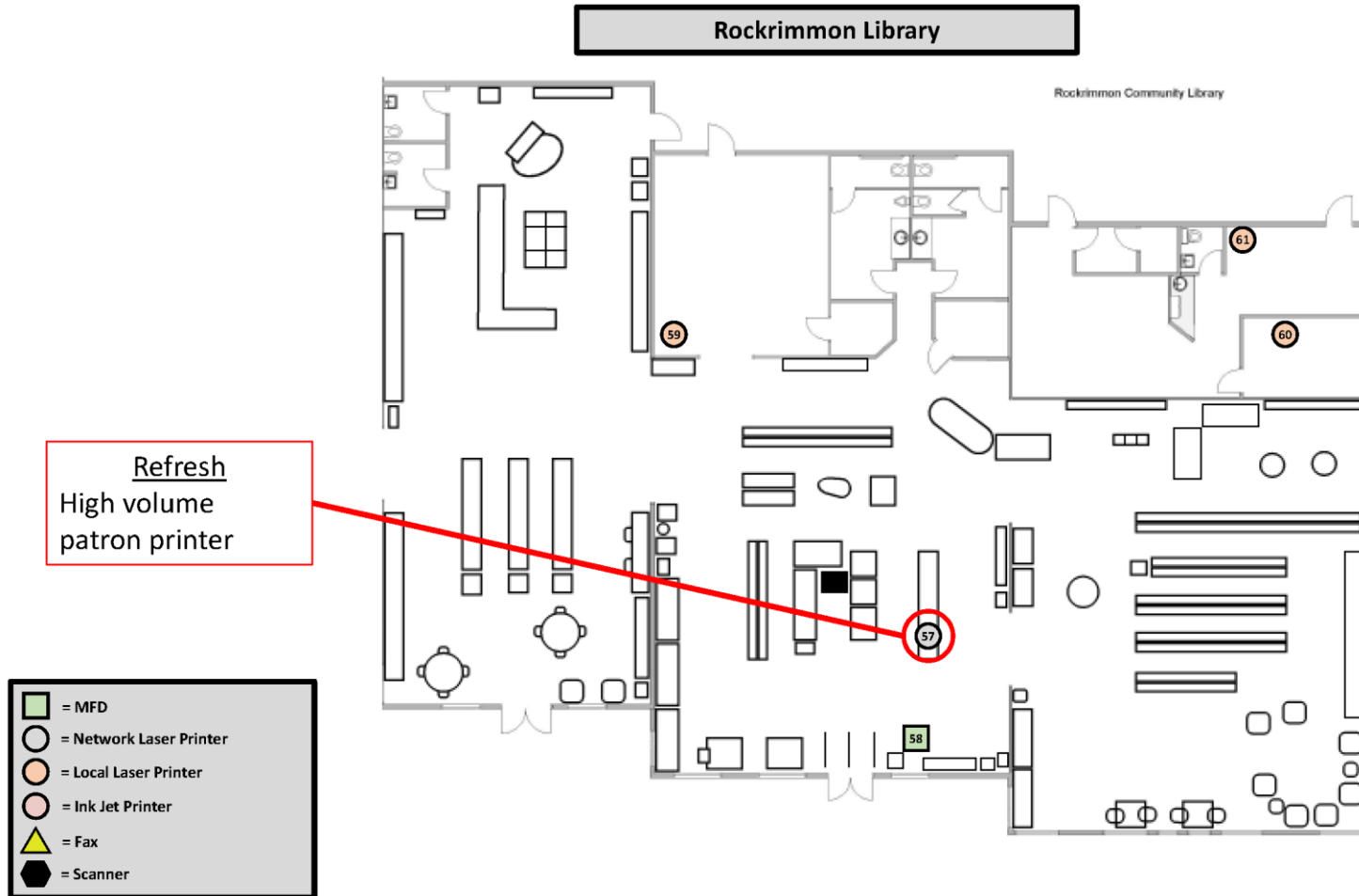
- = MFD
- = Network Laser Printer
- = Local Laser Printer
- = Ink Jet Printer
- = Fax
- = Scanner



	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
47	Sharp	MX-3100n	Sand Creek	Patron Copier	9504822800	10.20.50.20	5,641	3,326	Refresh
48	HP	M601	Sand Creek	Patron Printer	CNCC741XK	10.20.100.10	5,248		Retain
49	Envision		Sand Creek	SCANNER					Retain
50	HP	P1606DN	Sand Creek	Staff Printer	VNB3M12913	Local	1,782		Refresh
51	HP	P1606DN	Sand Creek	Manager Printer	VND3F55338	Local	216		Refresh
52	Lexmark	E350D	Sand Creek	Asst Mngr Office	620X29K	Local	219		Refresh
53	HP	CP1518ni	Sand Creek	Staff Office	CNCC8BG16L	Local	88	233	Refresh
54	HP	P1606DN	Sand Creek	Staff Workroom	VND3F55345	Local	415		Refresh
55	HP	K8600	Sand Creek	Staff Workroom	TH94N220BW	Local	50		Retire
56	HP	P1606DN	Sand Creek	Childrens Desk	VNB3B67305	Local	29		Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	5,641	3,326	51.99%
1_0	Network Laser Printer	5,248	0	30.42%
5_1	Local Laser Printer	2,750	233	17.29%
1	Scanner			
1	Inkjet Printers	50		0.29%

17,248



	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
57	HP	M601	Rockrimmon	Patron Printer	CNCCF8L15B	10.10.100.10	4,974		Retain
58	Sharp	MX3100N	Rockrimmon	Patron Copier	9504869800	10.10.100.11	1,866	1,579	Refresh
59	HP	P1606DN	Rockrimmon	Work Room	VNB3G26726	Local	271		Refresh
60	HP	P1606DN	Rockrimmon	Supervisor Office	VNB3G26728	Local	131		Refresh
61	HP	P1606DN	Rockrimmon	Steve Abbott's Office	VNB3M12915	Local	70		Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	1,866	1,579	38.74%
1_0	Network Laser Printer	4,974	0	55.95%
3_0	Local Laser Printer	472	0	5.31%
0	Scanner			







8,891

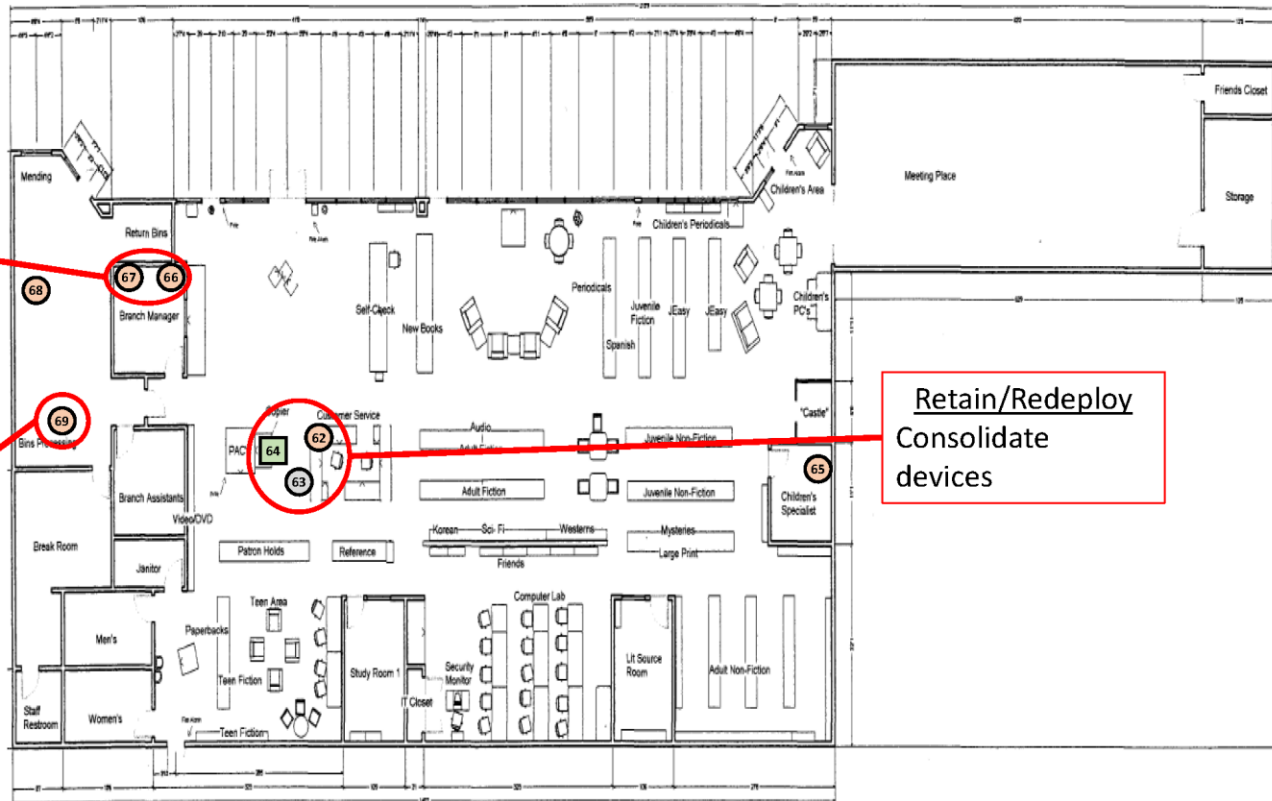
Ruth Holley Branch Library

Retire/Refresh
Consolidate devices

Refresh
Is color machine needed?

Retain/Redeploy
Consolidate devices

-  = MFD
-  = Network Laser Printer
-  = Local Laser Printer
-  = Ink Jet Printer
-  = Fax
-  = Scanner



	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
62	HP	P1606DN	Ruth Holley	Customer Service	VNB3D41196	Local	1,263		Retire
63	HP	M601	Ruth Holley	Patron Printer	CNCCF8L14T	10.30.100.10	2,675		Retain
64	Sharp	MX3100N	Ruth Holley	Patron Copier	9504848800	10.30.200.20	3,482	4,261	Refresh
65	HP	P1606DN	Ruth Holley	Childrens Office	VNB3M12905	Local	182		Refresh
66	HP	P1606DN	Ruth Holley	Branch Mgr Office	VNB3G26729	Local	157		Retire
67	HP	M251nw	Ruth Holley	Branch Mgr Office Security System	CNB1G08893	Local	1	0	Refresh
68	HP	P1606DN	Ruth Holley	Work Room	VNB3G25865	Local	1,235		Refresh
69	HP	CP1518ni	Ruth Holley	Branch Asst Office	CNCC8BG17F	Local	77	352	Refresh







B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	3,482	4,261	56.58%
1_0	Network Laser Printer	2,675	0	19.55%
4_2	Local Laser Printer	2,915	352	23.87%
0	Scanner			

13,685

Fountain Branch Library



Refresh
Ensure volume goes to lower cost copier

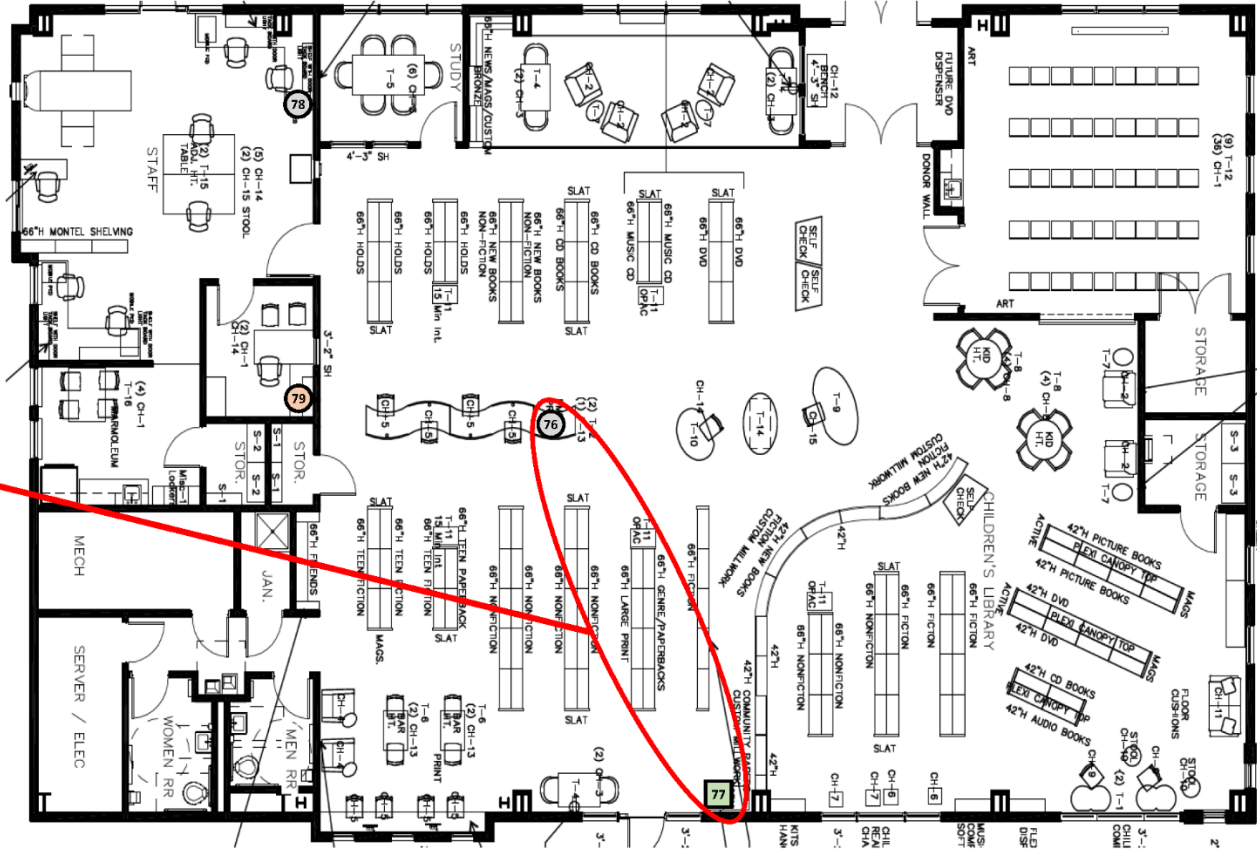
-  = MFD
-  = Network Laser Printer
-  = Local Laser Printer
-  = Ink Jet Printer
-  = Fax
-  = Scanner

	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
70	HP	M601	Fountain	Patron Printer	CNCCF8L156	10.50.100.10	7,760		Retain
71	Sharp	MX3100N	Fountain	Patron Copier	9504966800	10.50.105.15	1,520	1,945	Refresh
72	HP	P1606DN	Fountain	Information Desk	VNB3G69499	Local	532		Refresh
73	HP	P1606DN	Fountain	Mary & Abby Desk	VND3G07360	Local	87		Refresh
74	HP	P1606DN	Fountain	Staff Workroom	VNB3G26725	Local	125		Refresh
75	Lexmark	E350d	Fountain	Manager office	6215CW4	Local	17		Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	1,520	1,945	28.91%
1_0	Network Laser Printer	7,760	0	64.74%
4_0	Local Laser Printer	761		6.35%
0	Scanner			

11,986

High Prairie



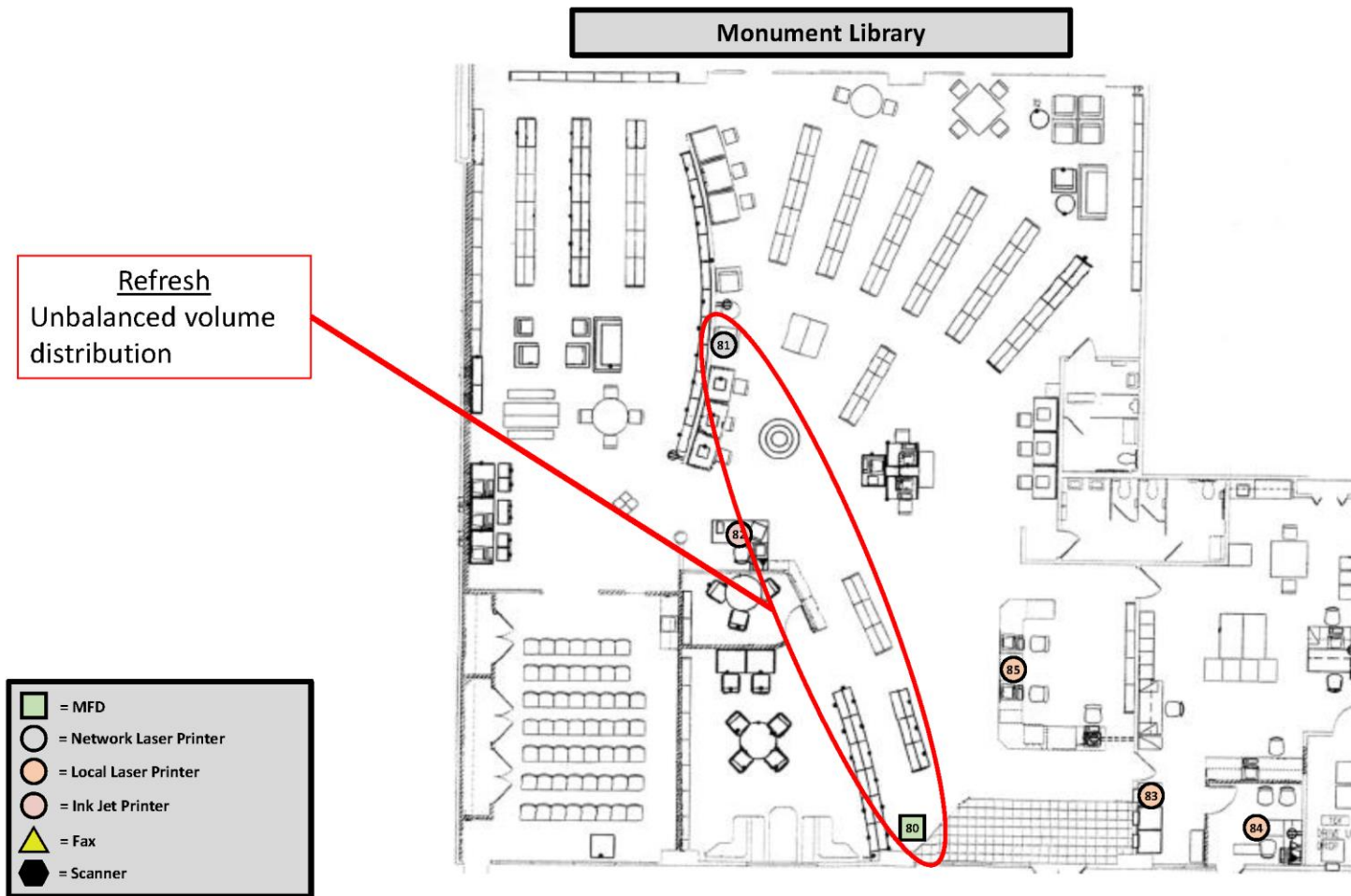
Refresh
 Switch machines location to ensure high volume prints go to copier

- = MFD
- = Network Laser Printer
- = Local Laser Printer
- = Ink Jet Printer
- = Fax
- = Scanner

	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
76	HP	M601	High Prairie	Patron/Staff Printer	CNCCF741Y2	10.120.200.11	4,777		Refresh
77	Sharp	MX3100N	High Prairie	Color/ ok Quality, varies	9504931800	10.120.200.37	1,150	1,975	Redeploy
78	HP	P1404	High Prairie	Staff Workroom	CNDX162118	10.120.200.10	632		Retain
79	HP	P1606DN	High Prairie	Michael's Office	VND3G07356	Local	204		Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	1,150	1,975	35.77%
2_0	Network Laser Printer	5,409	0	61.89%
1_0	Local Laser Printer	204	0	2.34%
0	Scanner			

8,739

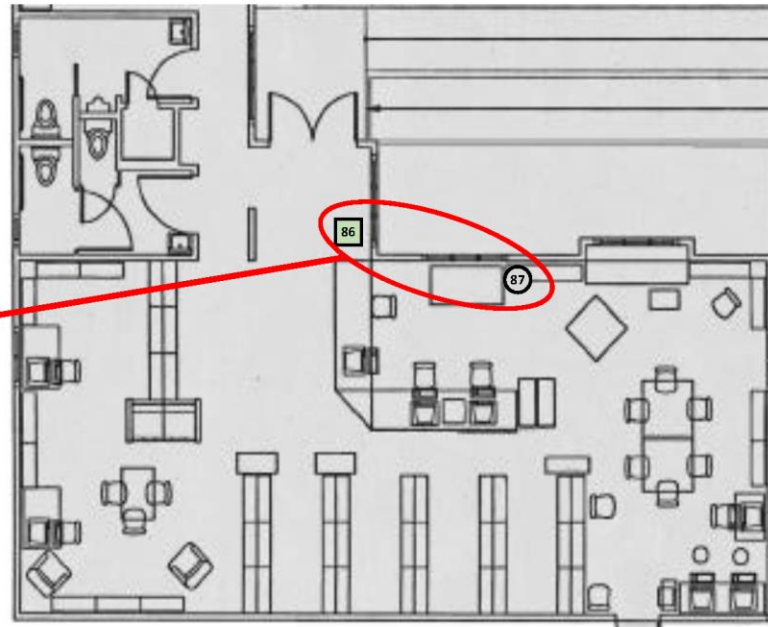


	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
80	Sharp	MX3100N	Monument	Like Scan to Email	9504877800	10.60.100.15	1,985	1,052	Refresh
81	HP	M601	Monument	Patron Printer	CNCCF8L14Y	10.60.100.10	5,741		Retain
82	HP	Envy 5530	Monument	Seldom Used/ Scan	CN523461GJ	Local	50		Retire
83	HP	M251nw	Monument	Work Room	CNB1H01655	Local	314	521	Refresh
84	HP	P1606DN	Monument	Drew Mgr Office	VNB3G69487	Local	61		Refresh
85	HP	P1606DN	Monument	Information Desk	VNB3G26727	Local	631		Refresh







B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	1,985	1,052	29.32%
1_0	Network Laser Printer	5,741	0	55.44%
2_1	Local Laser Printer	1,006	521	14.75%
0	Scanner			
1	Inkjet Printer	50		0.48%

10,355

Palmer Lake



Refresh
Unbalanced Volume
distribution

-  = MFD
-  = Network Laser Printer
-  = Local Laser Printer
-  = Ink Jet Printer
-  = Fax
-  = Scanner

	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
86	Sharp	MX2600	Palmer Lake	Main Copier	8507969600	10.100.200.20	204	416	Refresh
87	HP	P1404	Palmer Lake		CNDX334019	10.100.100.10	831		Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	204	416	42.73%
1_0	Network Laser Printer	831	0	57.27%
0	Local Laser Printer	0	0	0.00%
0	Scanner			

1,450

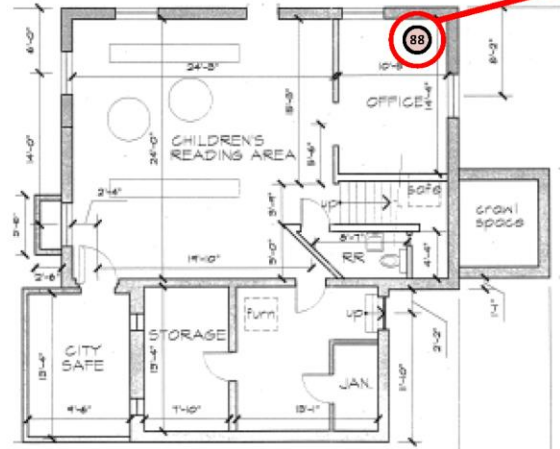
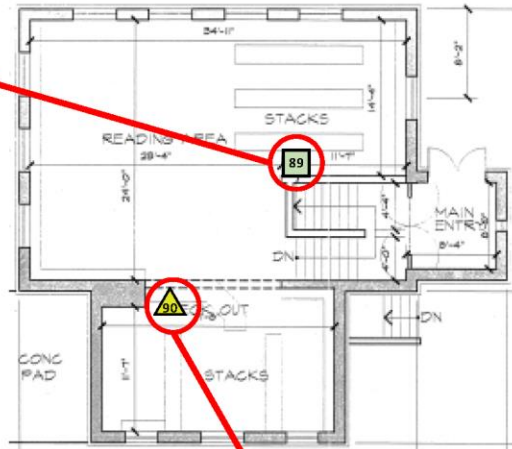
Manitou Springs

Main Level

Lower Level

Refresh
Include fax board

Retire
If machine is needed
here refresh with
new technology



Retire
Fax can be done if copier is
refreshed with new technology

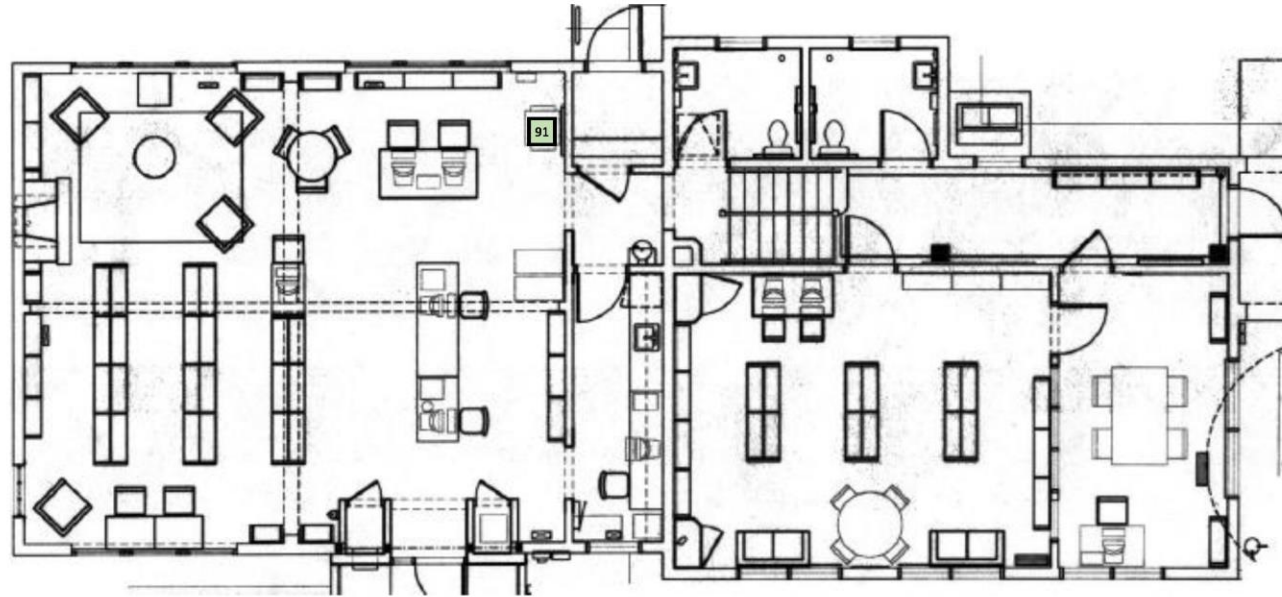
- = MFD
- = Network Laser Printer
- = Local Laser Printer
- = Ink Jet Printer
- = Fax
- = Scanner







	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
88	HP	6500	Manitou Spg	Wireless Margarets Office	TH02G2125Z05G2	Local	202		Retire
89	Sharp	MX2600n	Manitou Spg	Reading Area Stacks	8511769600	10.125.200.20	2,525	1,145	Refresh
90	Brother	575-Fax	Manitou Spg	Front Desk		Local	50		Retire

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	2,525	1,145	93.57%
0	Network Laser Printer	0	0	0
0	Local Laser Printer	0	0	0
0	Scanner			
1	Fax	50	N/A	1.27%
1	Inkjet Printer	202		5.15%

3,922

Ute Pass



-  = MFD
-  = Network Laser Printer
-  = Local Laser Printer
-  = Ink Jet Printer
-  = Fax
-  = Scanner

 Great Deployment







	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
91	Sharp	Mx2600n	Ute Pass	Main Copier	8508084600	10.90.100.11	517	837	Refresh

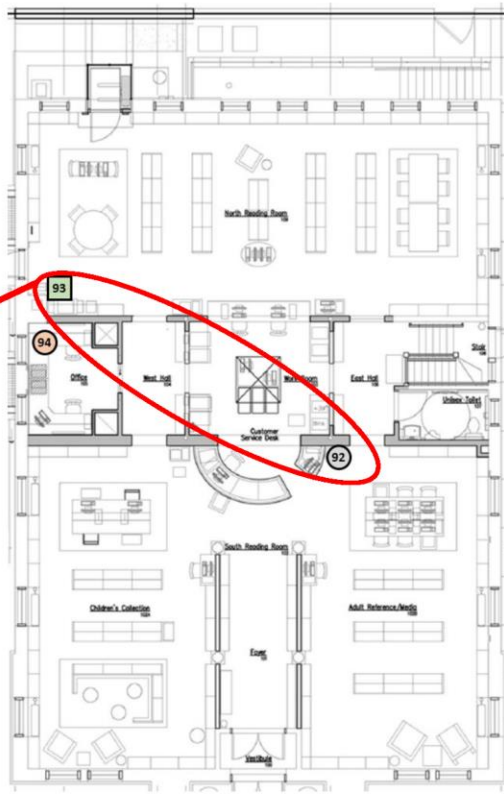
B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	517	837	100.00%
0	Network Laser Printer			0.00%
0	Local Laser Printer			0.00%
0	Scanner			

1,354

Old Colorado City Library

Refresh
Unbalanced volume
distribution

-  = MFD
-  = Network Laser Printer
-  = Local Laser Printer
-  = Ink Jet Printer
-  = Fax
-  = Scanner



Main Level



Basement

	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
92	HP	M601	Old Colorado City	Patron/ Staff Printer	CNCCF8L153	10.70.200.10	8,273		
93	Sharp	MX3100N	Old Colorado City	1st Floor	9504777800	10.70.105.15	1,506	999	Refresh
94	HP	P1606DN	Old Colorado City	1st Floor	VNB3G69502	Local	217		Retire
95	HP	P1606DN	Old Colorado City	Basement Office	VND3B33933	Local	197		Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	1,506	999	22.38%
1_0	Network Laser Printer	8,273	0	73.92%
2_0	Local Laser Printer	414	0	3.70%
0	Scanner			

11,191

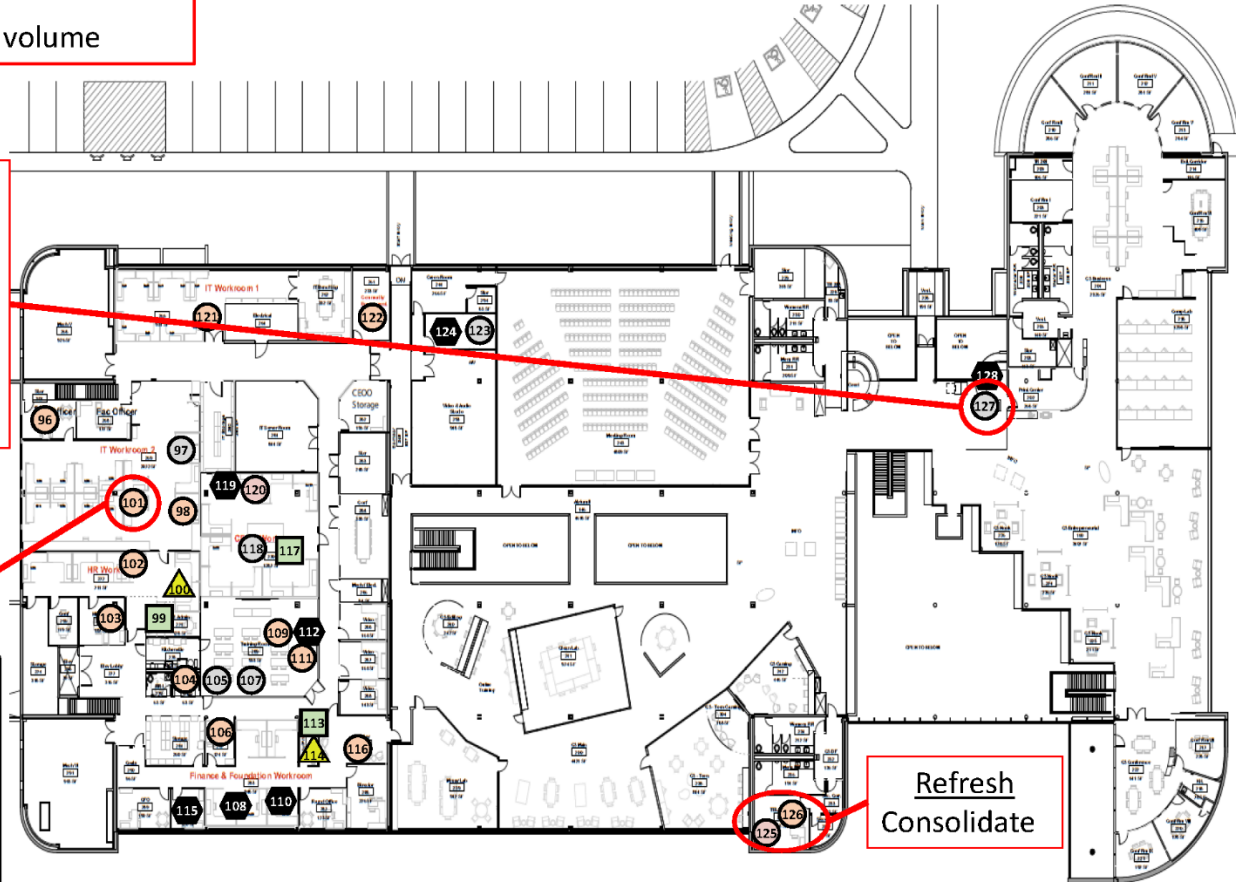
* 30% of fleet at this location non-networked
 * MFD have appropriate volume

21C- Upper Level

Refresh
 Highest volume device at location. Outside monthly usage specifications. \$1500/month operation costs

Retire
 Extremely low volume

- = MFD
- = Network Laser Printer
- = Local Laser Printer
- = Ink Jet Printer
- = Fax
- = Scanner



Refresh Consolidate

	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
96	HP	M127FN	21C	Richards IT Office	CNB9GCPJ6P	Local	138		Refresh
97	HP	M601	21C	IT Workroom	CNCCF8L145	10.81.105.53	637		Retain
98	HP	P1606DN	21C	Juanita Desk	VNB3M12907	Local	141		Refresh
99	Sharp	MX3100N	21C	HR	9504846800	Local	1,755	2,344	Refresh
100	Brother	2840	21C	HR Fax	U63274C3J69978	local	8		Retire
101	HP	LJ5	21C	Talent MGR	na	Local	0		Retire
102	HP	P1606DN	21C	Volunteeer Supervuicir	VNB3M12911	Local	307		Refresh
103	HP	P1606DN	21C	HR Supervisor	VNB3G69491	Local	354		Refresh
104	HP	P1606DN	21C	Isabel Asst to Foundation	VNB3B67307	Local	273		Refresh
105	HP	4250	21C	Finance	CNGXF25558	10.81.105.54	603		Refresh
106	HP	P1606DN	21C	Payroll	VNB3G26724	Local	453		Refresh
107	HP	M602	21C	Finance	CNBCD72117	10.81.105.55	2,604		Retain
108	Patriot	D40	21C	Sara Desk					Retain
109	HP	P1606DN	21C	Dana Austin	VNB3M12909	Local	514		Refresh
110	Fujitsu	7160	21C	Dana Austin					Retain
111	HP	M251nw	21C	Mary Desk	CNBFJ05541	Local	45	1,440	Refresh
112	Visioneer		21C	Merry Desk					Retain
113	Sharp	MX6201	21C	Finance Copy Rm	8500428900	10.81.105.51	4,421	1,569	Refresh
114	Brother	2840	21C	Finance Copy Rm	U63274C4J638254	Local	23		Retire
115	HP	N6310	21C	Deputy Finance Officer					Retain
116	HP	P1606DN	21C	FOUNDATION Vol. Desk	VND3G07358	Local	4		Retire
117	Konica	C454e	21C	CEO	A5C0011010046	10.81.105.56	1,436	5,150	Retain
118	HP	M712	21C	CEO	CNCCG1N04T	10.81.105.57	279		Refresh
119	HP	7650	21C	Susan's Area					Refresh
120	HP	23200	21C	Susan's Area	na	Local	50		Retire
121	HP	M451dn	21C	IT Annex	CNDF348094	Local	134	337	Refresh
122	HP	M252dw	21C	CEO Officer	VNB3F05855	Local	52	427	Refresh
123	HP	M127FN	21C	AV Control Booth	CNB9J5NCV2	10.81.101.252	106		Retain
124	HP	4890	21C	AV Control Booth					Retain
125	HP	8610	21C	District Security Officer	CN4BPEX09H	Local	180		Retire
126	HP	M277dw	21C	Security Office	VNB8H5NPCP	Local	92	204	Retain
127	HP	M651	21C	Patron Use Area	JPCCJC80T7	10.82.105.50	404	17,737	Refresh
128	Envision		21C	Patron Use Area					Retain

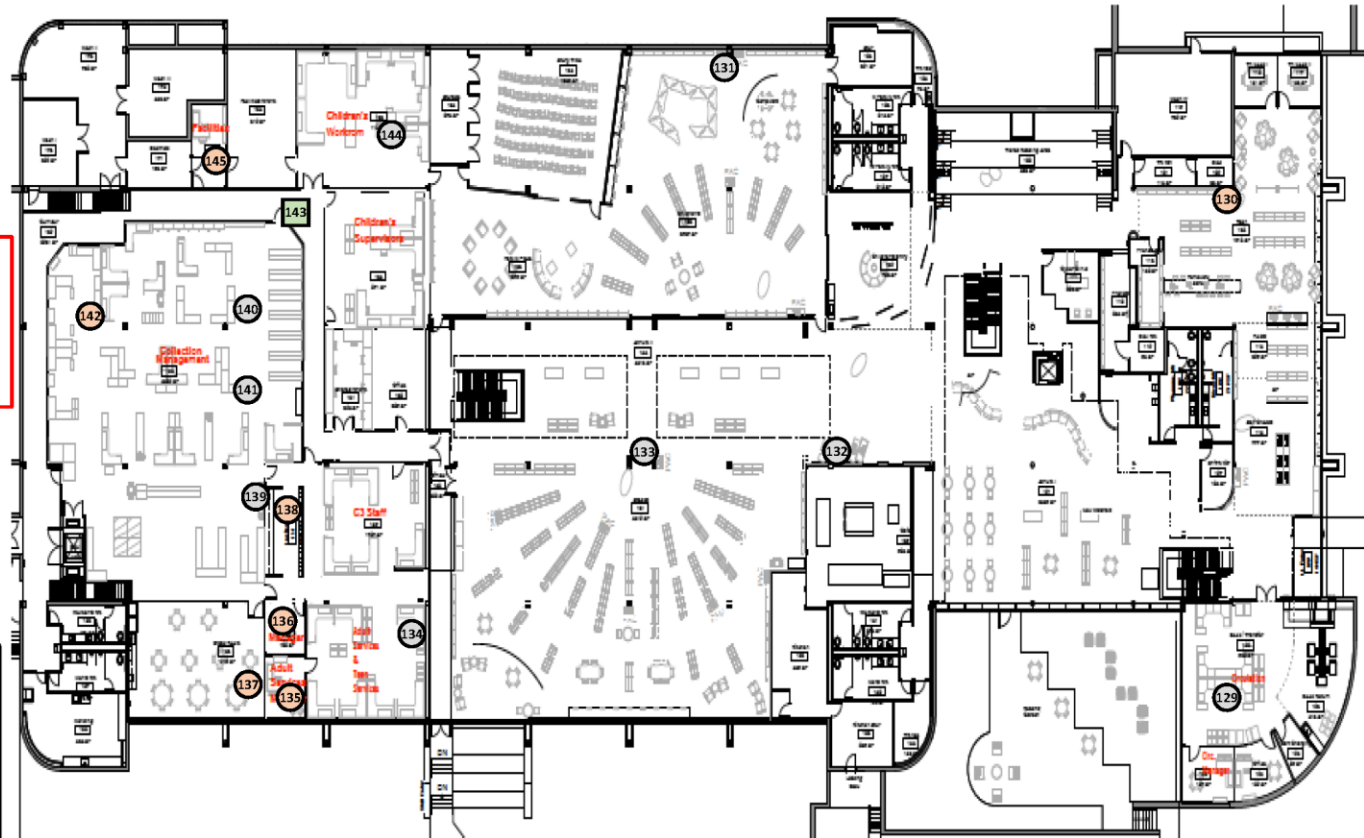
B/W_Color	Device Category	B/W	Color	% of Vol
0_3	MFD	7,612	9,063	37.71%
5_1	Network Laser Printer	4,635	17,737	50.59%
9_4	Local Laser Printer	2,508	2,407	11.11%
7	Scanner			
2	Fax	31		0.07%
2	Inkjet Printer	230		0.52%

44,223

21C-Lower Level

* Opportunity to retire 4 printers currently printing < 100 pages per month

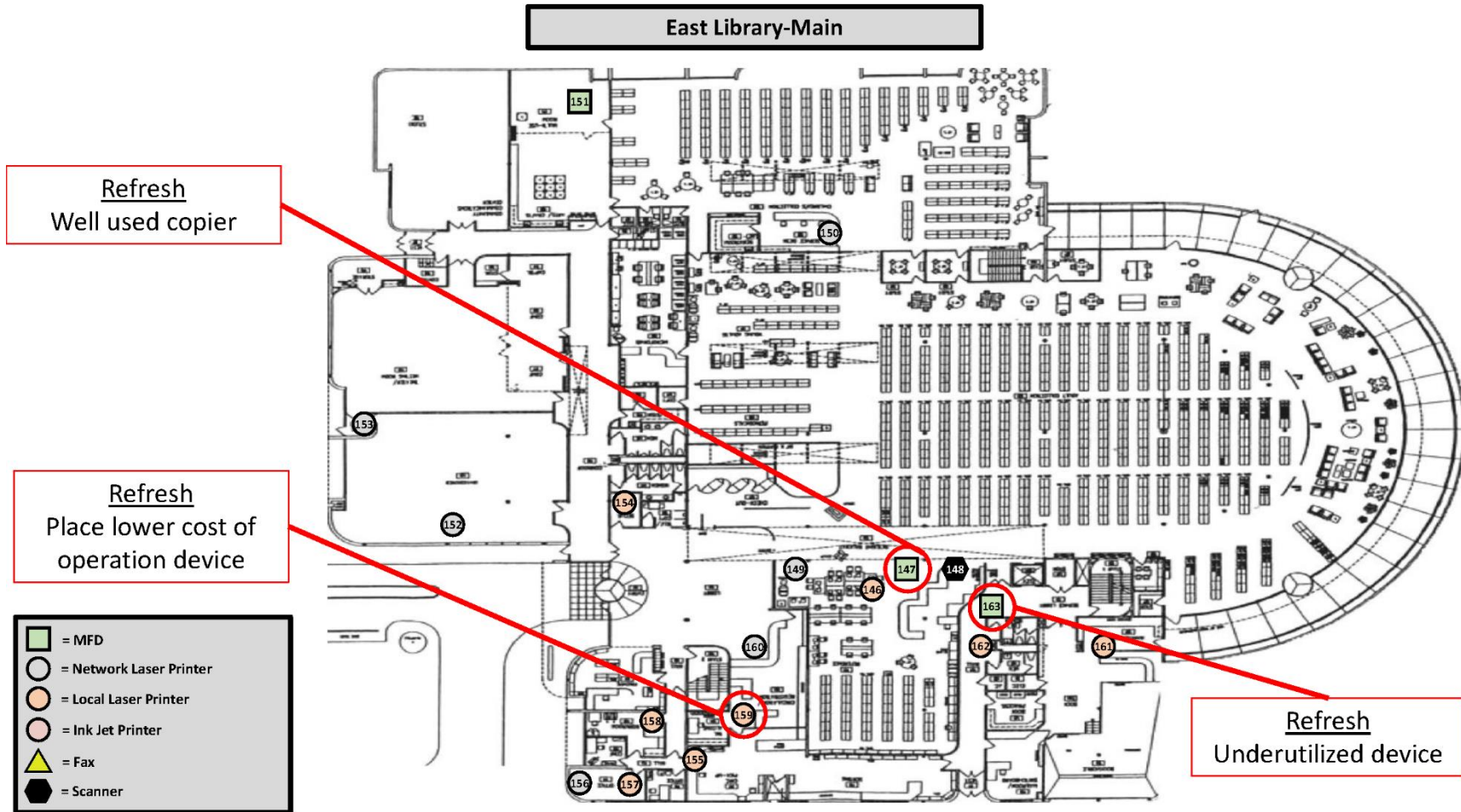
- = MFD
- = Network Laser Printer
- = Local Laser Printer
- = Ink Jet Printer
- ▲ = Fax
- = Scanner



	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
129	HP	P4014	21C LL	Circulation Work Area	CNDX185988	10.81.105.62	961		Retain
130	HP	P1606DN	21C LL	Teen Center Staff/Patron Use	VNB3G69486	Local	182		Refresh
131	HP	P1606DN	21C LL	Kids Area	VND3F48581	10.81.105.63	397		Refresh
132	HP	CP4025	21C LL	1st Floor Print Center	JPCJCS0MT	10.82.105.51	877	3,357	Retain
133	HP	P1606DN	21C LL	Adult SVC Desk	VND3F48585	10.81.105.222	265		Refresh
134	HP	M601	21C LL	Adult SVC Back Area Staff Use	CNCCFD40L6	10.81.105.59	986		Retain
135	HP	CP1518ni	21C LL	Adult Svc Supervisor	CNCC8BG179	Local	15	17	Refresh
136	HP	P1606DN	21C LL	MGR Office	VND3F48580	Local	74		Refresh
137	HP	P1606DN	21C LL	Breakroom-New	VND3G07355	Local	1		Refresh
138	HP	P1606DN	21C LL	Collection Mgmt Office	VNB3G69495	Local	36		Refresh
139	HP	M601	21C LL	Collection Mgmt Office	CNCCFD40K6	10.81.105.65	749		Retain
140	HP	M601	21C LL	Collection Mgmt Office	CNCCFD40KJ	10.81.105.66	2,048		Retain
141	HP	P4015	21C LL	Inner Library Loans	CNDYC62629	10.81.105.71	2,461		Refresh
142	HP	M451dn	21C LL	Collection Mgmt Office 3	CNDF370417	Local	722	163	Retain
143	Sharp	MX3100N	21C LL	Staff Hallway	9504891800	10.81.105.64	2,190	4,531	Refresh
144	HP	M601	21C LL	Childrens Staff	CNCCFD10M6	10.81.105.60	44		Retain
145	HP	P1606DN	21C LL	Facilities office	VND3G07357	Local	190		Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	2,190	4,531	33.17%
8_1	Network Laser Printer	8,787	3,357	59.93%
5_2	Local Laser Printer	1,220	180	6.91%
1	Scanner			

20,264



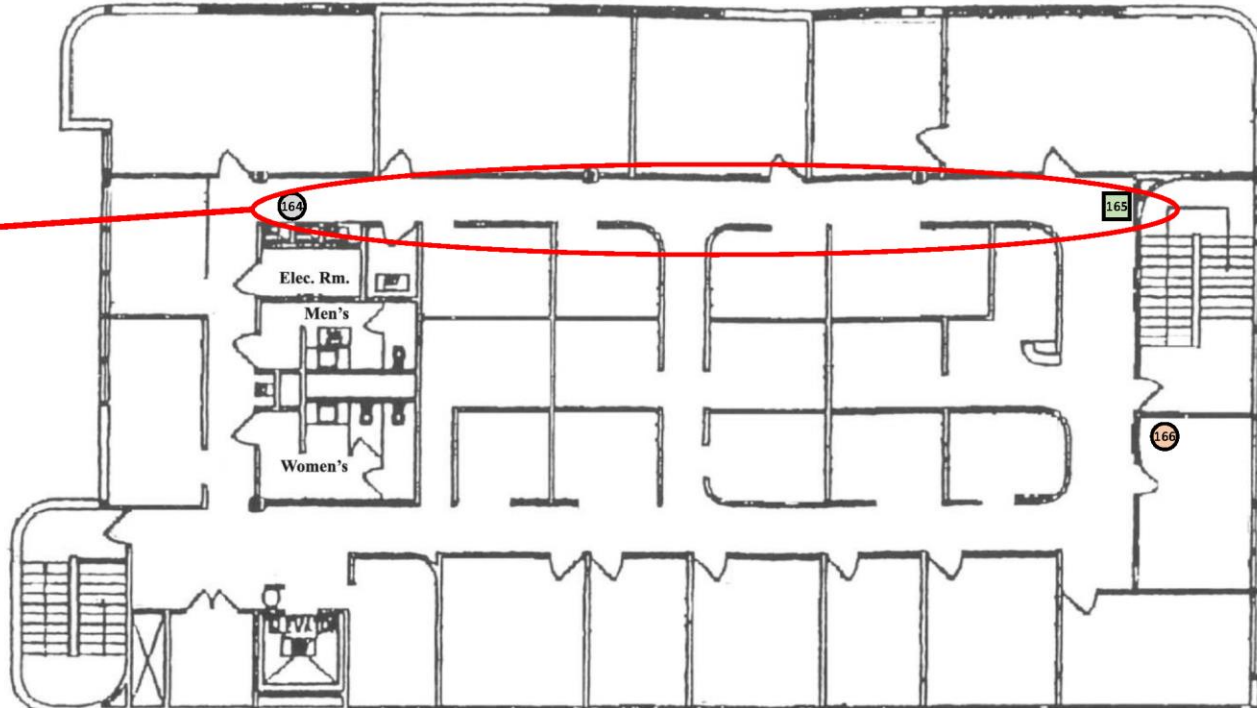
	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
146	HP	P1606DN	East Library	Information Desk	VND3F63868	Local	975		Refresh
147	Sharp	MX3100N	East Library	Patron MFP	9504814800	10.1.200.14	7,945	535	Refresh
148	Envision		East Library	Patron Printer					Retain
149	HP	CP4025	East Library	Learning Lab	JPDCJ810TX	10.1.200.11	3,782	2,387	Retain
150	HP	4250	East Library	Childrens Ref. Desk	CNRXK90930	10.1.200.12	551		Refresh
151	Sharp	MX2600N	East Library	Childrens Staff	8508036600	10.1.105.104	922	2,728	Refresh
152	HP	4250N	East Library	Teen Patron-no config	CNRXK17882	10.1.100.245	421		Refresh
153	DELL	3110CN	East Library	Teen Storage Closet	926980123	10.1.100.243	4	45	Refresh
154	HP	M277DW	East Library	Security Office	VNB8K1K047	Local	156	193	Refresh
155	HP	P1606DN	East Library	Marion Robert	VND3F55340	Local	433		Refresh
156	HP	P1606DN	East Library	Greg Rose	VND3F63865	10.81.105.62	395		Refresh
157	HP	M127FN	East Library	NancyLucre	CNB9H5C1JV	Local	28		Retire
158	HP	P1606DN	East Library	Terry Ford	VND3F63866	Local	542		Refresh
159	HP	P1606DN	East Library	Circulation OFFICE	VNB3G26707	Local	1,988		Refresh
160	HP	P1606DN	East Library	Check out	VND3C29107	10.1.100.249	410		Refresh
161	HP	P1606DN	East Library	Facilities office	VND3C29111	Local	156		Refresh
162	HP	P1606DN	East Library	Switchboard	VNB3M12908	Local	359		Refresh
163	Sharp	MX2600n	East Library	Switchboard	8511770600	10.1.105.102	1,913	498	Refresh







B/W_Color	Device Category	B/W	Color	% of Vol
0_3	MFD	10,780	3,761	53.13%
4_2	Network Laser Printer	5,564	2,433	29.22%
7_1	Local Laser Printer	4,637	193	17.65%
1	Scanner			

27,367

East Library-2nd Floor

Refresh
Unbalanced volume
distribution

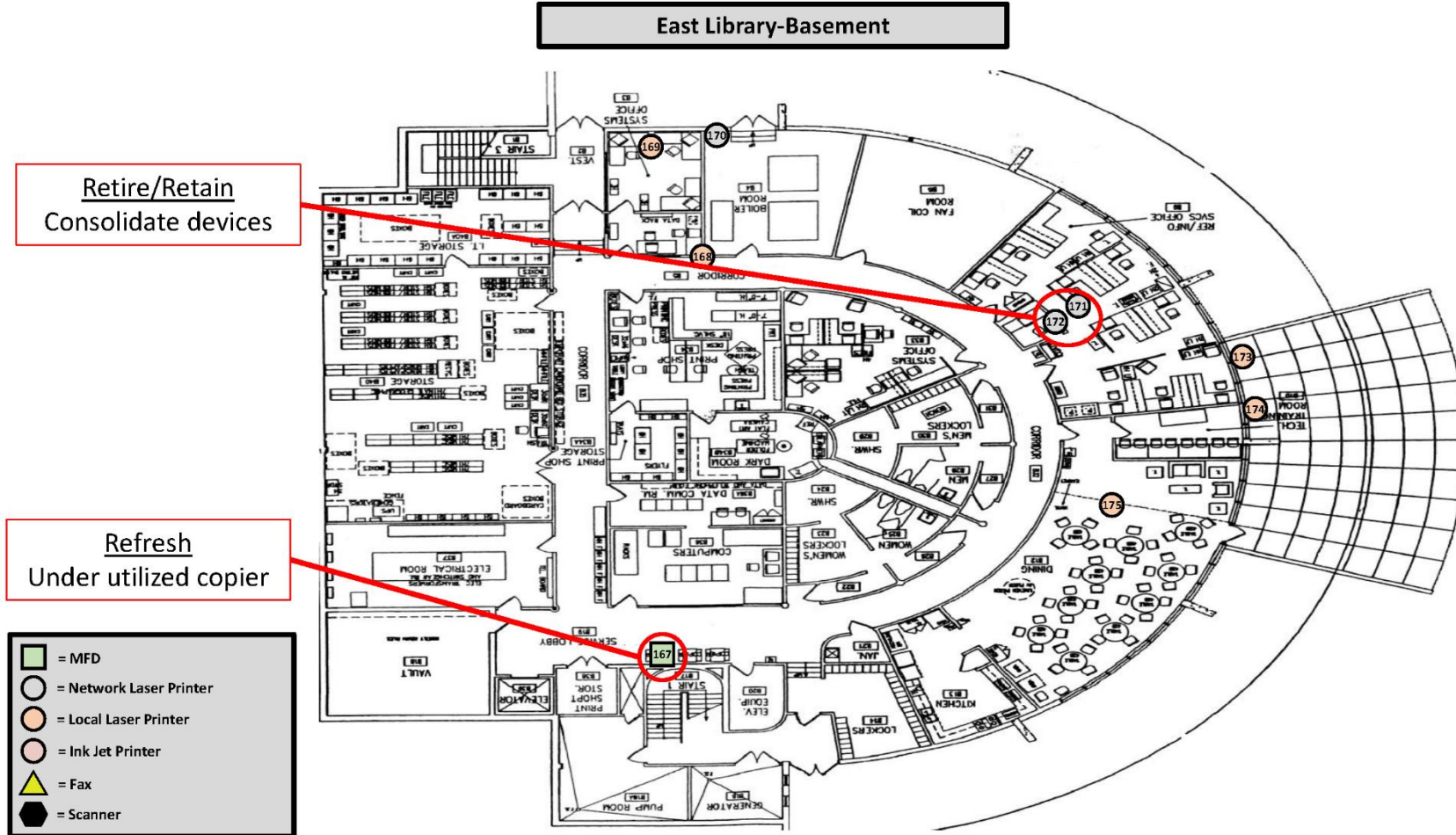


-  = MFD
-  = Network Laser Printer
-  = Local Laser Printer
-  = Ink Jet Printer
-  = Fax
-  = Scanner

	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
164	HP	CP4025	East Library 2nd Floor	Computer Lab Self Service	JPDCH2Q0WC	10.1.200.10	12,867	8,425	Refresh
165	Sharp	MX3100N	East Library 2nd Floor	Computer Lab	9504844800	Local	867	103	Refresh
166	HP	P1606DN	East Library 2nd Floor	Jannice Mcpherson	VNB3M12912	Local	224		Refresh

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	867	103	4.31%
0_1	Network Laser Printer	12,867	8,425	94.69%
1_0	Local Laser Printer	224	0	1.00%
0	Scanner			

22,486



	MAKE	MODEL	BUILDING	LOCATION	SN	IP	B/W	COLOR	4 R's
167	Sharp	MX6201N	East Library Basement	Basement copier	8500481900	10.1.105.103	1,952	1,348	Refresh
168	HP	P1606DN	East Library Basement	Facility Supervisor	VNB3M12916	Local	122		Refresh
169	HP	P1606DN	East Library Basement	On-Site IT-new	VNB3B65869	Local	50		Retire
170	HP	4250	East Library Basement	On-Site IT-new	CNGXF23802	10.1.100.251	2,615		Retain
171	HP	4250	East Library Basement	Staff Office West	CNRXK17895	10.1.100.250	513		Retire
172	HP	451DN	East Library Basement	Staff Office West	CNDF268363	10.1.100.248	162	1,176	Retain
173	Lexmark	E350d	East Library Basement	Trent Templeton	6228YYX	Local	132		Refresh
174	HP	P1606DN	East Library Basement	Joanna Rendon	VND3F55344	Local	134		Refresh
175	HP	P1606DN	East Library Basement	Breakroom	VND3F55339	Local	399		Retire

B/W_Color	Device Category	B/W	Color	% of Vol
0_1	MFD	1,952	1,348	38.36%
2_1	Network Laser Printer	3,289	1,176	51.90%
5_0	Local Laser Printer	838		9.74%
0	Scanner			

8,603

Printer Cost Summary (Invoices)

Location	Address	# of Printers	11 months Jan - Nov 2017		Monthly Average		Monthly Average Volume		Total	Weighted Blended CPP
			# of Toner	Toner Cost	# of Toner	Toner Cost	B/W	Color		
20 N Cascade	Penrose/Spec Coll/ Knights	30	133	\$13,934.65	12	\$1,266.79	32,588	10,844	43,432	\$0.0292
1175 Chapel Hills	21C	39	119	\$18,194.87	11	\$1,654.08	17,179	23,911	41,090	\$0.0403
5550 N. Union	East Public Library	24	85	\$11,485.91	8	\$1,044.17	27,420	12,226	39,646	\$0.0263
1785 S 8TH	Cheyenne Mountain Library	5	27	\$2,090.48	2	\$190.04	14,181	0	14,181	\$0.0134
2418 W Pikes	Old Colorado City Branch Library	3	12	\$938.13	1	\$85.28	8,687	0	8,687	\$0.0098
230 S Main	Fountain Library	5	19	\$1,469.06	2	\$133.55	8,521	0	8,521	\$0.0157
1821 S. Academy	Sand Creek Branch Library	8	52	\$3,926.32	5	\$356.94	7,997	283	8,280	\$0.0431
1706 Lake Woodmoor	Monument Library	5	27	\$1,724.89	2	\$156.81	6,747	571	7,318	\$0.0214
685 N Murray	Ruth Holley Public Library	7	50	\$3,657.63	5	\$332.51	5,590	352	5,942	\$0.0560
7035 Old Meridian	High Prairie Library	3	9	\$746.13	1	\$67.83	5,613	0	5,613	\$0.0121
832 Village Center Dr	Rockrimmon Branch Library	4	13	\$1,198.43	1	\$108.95	5,447	0	5,447	\$0.0200
701 Manitou	Manitou Springs Library	2	36	\$630.03	3	\$57.28	50	202	252	\$0.2273
8010 Severy Rd	Ute Pass Branch Library	0	6	\$391.24	1	\$35.57	0	0	0	NA
66 Lower Glenway	Palmer Lake	1					831		831	
Totals		136	588	\$60,387.77	53	\$5,490	140,851	48,389	189,240	\$0.0290

Copier Cost Summary (Invoices)

Location	Address	10 months Jan - Oct 2017			Monthly Average		Monthly Average Volume		Total	Weighted Blended CPP
		# of Copiers	# of Toner	Toner Cost	# of Toner	Toner Cost	B/W	Color		
5550 N. Union	East Public Library	5	46	\$7,374.97	5	\$737.50	13,600	5,209	18,809	\$0.04
20 N Cascade	Penrose/Spec Coll/ Knights	9	26	\$3,823.50	3	\$382.35	48,318	48,600	96,918	\$0.0039
1175 Chapel Hills	21C	4	43	\$6,782.49	4	\$678.25	9,802	13,594	23,396	\$0.03
1821 S. Academy	Sand Creek Branch Library	1	17	\$2,704.50	2	\$270.45	5,641	3,326	8,967	\$0.03
685 N Murray	Ruth Holley Public Library	1	30	\$4,983.00	3	\$498.30	3,482	4,261	7,743	\$0.06
7035 Old Meridian	High Prairie Library	1	9	\$1,546.50	1	\$154.65	1,150	1,975	3,125	\$0.05
1785 S 8TH	Cheyenne Mountain Library	1	14	\$2,223.00	1	\$222.30	3,592	1,778	5,370	\$0.04
701 Manitou	Manitou Springs Library	1	17	\$2,635.50	2	\$263.55	2,525	1,145	3,670	\$0.07
832 Village Center Dr	Rockrimmon Branch Library	1	11	\$1,896.00	1	\$189.60	1,866	1,579	3,445	\$0.06
230 S Main	Fountain Library	1	9	\$1,632.00	1	\$163.20	1,520	1,945	3,465	\$0.05
1706 Lake Woodmoor	Monument Library	1	12	\$2,113.50	1	\$211.35	1,985	1,052	3,037	\$0.07
2418 W Pikes	Old Colorado City Branch Library	1	9	\$2,023.50	1	\$202.35	1,506	999	2,505	\$0.08
8010 Severy Rd	Ute Pass Branch Library	1	4	\$784.50	0	\$78.45	517	837	1,354	\$0.06
66 Lower Glenway	Palmer Lake	1	4	\$784.50	0	\$78.45	204	416	620	\$0.13
Totals		29	251	\$41,307.46	25	\$4,131	95,708	86,716	182,424	\$0.023

Cost Per Page Analysis (Supply Cost)

Make	Model	Quantity	Average Monthly Volume			Cartridge Cost			Cartridge Yield			Cost of Operation		Monthly Cost	
			B/W	Color	Black	Cyan	Magenta	Yellow	Black	Color	Black	Color	B/W	Color	
Brother	2840	2	31		\$53.99			2,600		\$0.021		\$0.65			
Brother	575-Fax	1	50		\$19.99			150		\$0.133		\$6.66			
Dell	3110CN	1	4	45	\$83.99	\$140.59	\$140.59	5,000	4,000	\$0.017	\$0.126	\$0.07	\$5.70		
HP	1100	3	100		\$48.53			2,500		\$0.019		\$1.94			
HP	4015	1	3,298		\$143.24			10,000		\$0.014		\$47.24			
HP	4250	5	4,703		\$205.99			10,000		\$0.021		\$96.88			
HP	6500	1		202	\$10.99	\$20.90	\$20.90	920	300	\$0.012	\$0.246	\$0.00	\$49.67		
HP	8610	1		180	\$52.49	\$52.49	\$52.49	1,000	700	\$0.052	\$0.300	\$0.00	\$53.99		
HP	451DN	1	162	1,176	\$80.97	\$94.55	\$100.12	4,000	2,600	\$0.020	\$0.145	\$3.28	\$170.14		
HP	CP1518ni	4	474	5,639	\$68.32	\$70.29	\$70.29	2,200	1,400	\$0.031	\$0.199	\$14.72	\$1,124.54		
HP	CP4025	5	34,062	17,245	\$132.27	\$236.98	\$234.79	8,500	11,000	\$0.016	\$0.077	\$530.04	\$1,319.87		
HP	Envy 5530	1		50	\$38.99	\$38.99	\$38.99	480	165	\$0.081	\$0.945	\$0.00	\$47.26		
HP	K8600	1		50	\$52.49	\$52.49	\$52.49	700	700	\$0.075	\$0.300	\$0.00	\$15.00		
HP	LJ5	1			\$116.79			6,800		\$0.017					
HP	M127FN	3	272		\$53.29			1,500		\$0.036		\$9.66			
HP	M251nw	4	805	2,012	\$55.06	\$43.85	\$43.85	1,600	1,800	\$0.034	\$0.104	\$27.70	\$208.58		
HP	M252dw	1	52	427	\$61.56	\$72.86	\$72.86	1,500	1,400	\$0.041	\$0.200	\$2.14	\$85.42		
HP	M277dw	3	299	1,626	\$61.56	\$72.86	\$72.86	1,500	1,400	\$0.041	\$0.200	\$12.25	\$325.30		
HP	M451dn	2	856	500	\$88.21	\$90.36	\$90.36	4,000	2,600	\$0.022	\$0.138	\$18.88	\$69.06		
HP	M601	14	57,045		\$145.89			10,000		\$0.015		\$832.23			
HP	M602	1	2,604		\$145.89			10,000		\$0.015		\$37.99			
HP	M651	1	404	17,737	\$206.84	\$359.31	\$359.31	11,500	15,000	\$0.018	\$0.086	\$7.27	\$1,519.21		
HP	M712	1	279		\$206.89			10,000		\$0.021		\$5.78			
HP	P1606DN	65	29,522		\$71.99			2,100		\$0.034		\$1,012.04			
HP	P4014	2	1,375		\$100.85			10,000		\$0.010		\$13.87			
HP	P4015	1	2,461		\$100.85			10,000		\$0.010		\$24.82			
HP	Z3200	1													
Konica	C454e	2	40,521	42,100	\$125.00	\$188.99	\$188.99	27,500	26,000	\$0.005	\$0.027	\$184.18	\$1,120.47		
Lexmark	E250D	2	100		\$125.99			3,500		\$0.036		\$3.60			
Lexmark	E340	1	106		\$131.00			3,500		\$0.037		\$3.95			
Lexmark	E350D	3	369		\$109.99			3,500		\$0.031		\$11.58			
Sharp	MX2600N	10	9,578	5,993	\$132.00	\$217.50	\$217.50	18,000	15,000	\$0.007	\$0.052	\$70.24	\$313.43		
Sharp	MX3100N	16	39,236	35,706	\$132.00	\$217.50	\$217.50	18,000	15,000	\$0.007	\$0.052	\$287.73	\$1,867.42		
Sharp	MX6201N	2	6,373	2,917	\$115.00	\$249.99	\$249.99	42,000	32,000	\$0.003	\$0.027	\$17.45	\$78.85		

Fleet Usage

Average Monthly Volume		
	B/W	Color
Printers	140,851	48,389
Copiers	95,708	86,716
Total	371,664	

Percentage of Volume

	BW	Color
Printers	37.90%	13.02%
Copiers	25.75%	23.33%

Cost Per Page Weighted

	B/W	Color	Blended
Printers	\$0.0193	\$0.1264	\$0.0467
Copier	\$0.0058	\$0.0390	\$0.0216

High

	BW	Color
Printers	\$0.081	\$0.945
Copiers	\$0.007	\$0.052

Low

	BW	Color
Printers	\$0.010	\$0.077
Copiers	\$0.002	\$0.013

Operational Costs Yield Analysis

	Yield Analysis		Total	
	B/W	Color	Monthly	Annually
Printers	\$2,725.24	\$6,114.20	\$8,839	\$106,073
Copiers	\$559.60	\$3,380.17	\$3,940	\$47,277
Total			\$12,779	\$153,351

Recorded Cost

	Monthly	Annually
Printer	\$5,490	\$65,878
Copiers	\$4,131	\$49,569
Total	\$9,621	\$115,447