HCOE District Information and Computing Environment

District #	School District/Charter School	17-18 P2 ADA	17-18 Expenditures	# 2017 W2s	# 2017 1099s	User Count
02	Arcata	487.14	$8,101,086.48	379	27	35
	Coastal Grove Charter	219.25	$2,446,322.92			
	Fuente Nueva Charter	116.68	$1,341,970.35			
	Redwood Coast Montessori Charter	114.05	$1,570,481.79			
	Union Street Charter	97.50	$957,595.42			
03	No Humboldt High	1,400.65	$20,293,430.56	453	35	55
	Six Rivers High Charter	90.27	$1,083,685.34			
74	Laurel Tree Charter	117.34	$1,465,258.00	41	7	11
04	Big Lagoon Union	14.27	$698,594.72	17	4	8
05	Blue Lake Union	173.75	$2,366,141.90	73	4	8
07	Bridgeville	25.19	$573,257.84	22	3	8
08	Cuddeback Union	134.85	$1,893,378.27	43	4	10
09	Cutten	576.47	$6,126,924.64	126	6	6
12	Eureka City Schools	3,534.64	$52,772,989.02	797	33	70
71	Pacific View Charter	182.63	$2,244,105.06	38	6	23
45	Ferndale Unified	481.16	$6,651,939.49	119	12	15
15	Fieldbrook	141.91	$1,591,231.65	45	7	8
47	Fortuna Elementary	1,304.64	$14,045,154.71	295	8	23
73	Redwood Prep Charter	219.58	$1,859,289.26	44	5	8
17	Fortuna Union High	1,013.60	$14,271,848.23	196	7	15
18	Freshwater	288.14	$3,315,983.15	115	17	5
	Freshwater Middle Charter	50.67	$494,846.24			
19	Garfield	57.48	$770,427.27	25	7	9
21	Green Point	12.64	$306,144.22	10	2	10
24	Hydesville	182.45	$1,866,434.02	56	4	9
25	Jacoby Creek	450.41	$4,949,951.07	121	6	8
26	Klamath-Trinity	910.86	$47,008,961.98	321	22	8
27	Kneeland	15.75	$405,898.97	7	4	8
28	Loleta Union	93.26	$1,784,451.26	42	4	11
29	Maple Creek	6.38	$316,052.69	8	3	9
46	Mattole Unified	48.05	$1,952,433.19	176	39	11
31	McKinleyville Union	1,101.69	$13,113,153.80	307	8	9
32	Orick	16.03	$565,642.70	10	3	9
33	Pacific Union	521.81	$5,813,760.34	150	13	6
	Trillium Charter	41.00	$371,523.55			
34	Peninsula Union	33.53	$650,165.31	19	4	9
36	Rio Dell	312.18	$3,836,678.61	88	4	13
38	Scotia Union	186.11	$2,267,427.47	60	4	9
39	South Bay Union	410.05	$5,663,477.84	118	9	9
	South Bay Middle Charter	52.39	$514,597.13			
40	Southern Humboldt Unified	696.83	$17,931,230.98	198	11	17
41	Trinidad Union	192.03	$2,263,130.06	53	4	8
60/61	JPA (Medical/Liability)		$63,106,584.64			9
01	Humboldt County Office of Ed	142.57	$46,396,737.12	726	114	83
70	Northcoast Prep Academy Charter	191.93	$2,164,232.09	54	11	13
75	Northern United Charter*					11
	GRAND TOTAL	**16,459.81**	**$370,184,611.35**	**5,352**	**461**	**596**

* = new charter in 18-19

1) HCOE

The Humboldt County Office of Education serves all of Humboldt County's students, from pre-school through high school, and provides them with the tools they need to succeed in life. Total number of student enrollment for all the schools (excluding community college) within the county of Humboldt is approximately 18,501 in 76 district-run schools, 6 HCOE-run schools, and 14 charter schools. The total number of full-time employees for the organization is about 400.

2) Technology Support at HCOE

Central IT Organizational Environment

HCOE has a centralized IT environment, which includes six full-time staff members involved in providing IT resources and services to HCOE and to school. The staff consists of two helpdesk technicians, a programmer, a programmer/systems manager, a financial systems specialist and a manager.

3) Information Technology Department and Technology Department

The Information Technology department at HCOE provides leadership and hands-on technical expertise in information systems, computing, and telecommunication. We provide Internet service to most school districts in the county and maintain the computing and networking infrastructure to support the financial and administrative computing systems hosted at HCOE for participating district customers.

In addition to providing technology support to HCOE's staff and students to support student learning and instruction, the HCOE IT department provides the technological infrastructure and environment to support fiscal operations and accountability within the organization, and to those LEAs for which we provide fiscal oversight.

4) Organizational Network Infrastructure

HCOE serves as a node site for the California K12 High Speed Network (CENIC), with a 10 Gbps ethernet connection providing Internet service. We have a redundant 10 Gbps CENIC connection to Northern Humboldt High School District. All sites are connected via fiber optic circuits. They include:

1. Agnes J. Johnson
2. Ambrosini, Norman G.
3. Arcata School District
    Arcata Elementary
    Sunny Brae
4. Blue Lake Union
5. Bridgeville
6. Cuddeback Union
7. Cutten School District
    Cutten
8. Educational Resource Center (HCOE)
9. Eel River Community School (HCOE)

10. Eureka City Schools (maintains their own internet connection)
     Alice Birney
     Eureka Adult
     Eureka Senior High
     Grant
     Humboldt Virtual Academy
     Lafayette
     Lincoln Educational Center
     Washington
     Winship Middle School
     Winzler Children's Center
     Zane, Catherine L. Middle School
     Zoe Barnum High
11. Ferndale Unified School District
     Ferndale High
12. Ferndale Elementary
13. Fortuna Elementary
     Fortuna Middle
14. Freshwater
15. Garberville Community School (HCOE)
16. Garfield
17. Glen Paul School (HCOE)
18. Green Point
19. Honeydew
20. Hydesville
21. Klamath-Trinity Joint Unified School District
     Captain John Continuation High
     Hoopa Valley Elementary
     Hoopa Valley High
     Jack Norton
     Orleans
     Trinity Valley Elementary
     Weitchpec
22. Kneeland
23. Loleta Union
24. Maple Creek
25. Mattole Unified School District
     Mattole Triple Junction High
26. Northcoast Preparatory Academy Charter (Bayside)
27. Northcoast Preparatory Academy Charter (11th Street)
28. Northern Humboldt Union High School District (maintains their own internet connection)
     Academy of the Redwoods
     Arcata High
     Big Lagoon
     Dow's Prairie
     Fieldbrook
     Fortuna Union High School District
          Fortuna Union High
     East High

        Jacoby Creek School District
        McKinleyville Union School District
            McKinleyville Middle
        McKinleyville High
        Morris
        Pacific Coast High
        Trinidad Union
        Tsurai High

29. Orick
30. Pacific Union
31. Pacific View Charter (Henderson)
32. Pacific View Charter (Moore)
33. Peninsula Union
34. Pine Hill
35. Redway
36. Redwood Montessori
37. Ridgewood
38. Rio Dell District Office
        Eagle Prairie Elementary
        Monument Middle
39. Scotia Union
40. Special Education Local Area Plan (SELPA)
41. South Bay Union School District
        South Bay
42. South Fortuna Elementary
43. Southern Humboldt Unified School District
        Casterlin
        Miranda Junior High School
        Osprey Learning Center
        South Fork High
        Whitethorn
44. Trillium Charter
45. Toddy Thomas
46. Von Humboldt Court School (HCOE)
        New Horizon Court School (HCOE)

5) Wireless Access

HCOE provides centrally-managed Wi-Fi access at all of its sites.

6) Remote Access

HCOE provides VPN access to authorized HCOE and district staff via its Palo Alto firewall, which gives remote users secure connections to critical network resources on authorized computing devices.

7) Enterprise Platforms

The HCOE Technology Dept. maintains about fifty Windows- and Linux-based servers (on about 20 physical servers) that provide the following functions:

- Directory and authentication
- Name services
- Web filtering
- Web hosting
- Collaboration services
- Database services
- File storage
- Data backup
- Application services
- System monitoring
- Secure File Transfer

All business and financial system applications and data are maintained on separate servers from those used for other functions and operations at HCOE. These include the application and database servers, and the HP 3000 mainframe computer.

8) Disaster Recovery and co-location infrastructure

All HCOE servers are backed up to a Data Protection Server, replicated to other servers, and archived to tape. Tapes are stored offsite. There is also a redundant Data Protection Server offsite. We are exploring backing up to the cloud.

9) Networking infrastructure within Humboldt County School Districts

While each school district in the HCOE service area maintains its own unique networking architecture and infrastructure, all provide a similar core design to support the operation of a distributed business information system. Common features include:
- Fiber-optic connections between the district office and all primary campuses. These are in most cases 100 Mbps or 1 Gbps circuits provided by AT&T, Frontier or Suddenlink.
- HCOE provides name-resolution service to most school districts
- Desktop computing resources vary, but school districts have become accustomed to running their business and administrative information systems from PC or Mac based computers