



Distrito Escolar Unificado del Norte del Condado de Monterey

Presentación exhaustiva para la Junta Directiva de los
servicios para el Plan Maestro de Instalaciones
9.12.2019

THINK^{MK}
INTELLIGENT PLACES

Quiénes somos | El equipo

Juan Duque
Arquitecto del proyecto



Marijke Smit
Socia
Directora del
proyecto



John Berg
Socio
Asesor del proyecto

Josh Jackson
Estrategias de
Planificación
Director



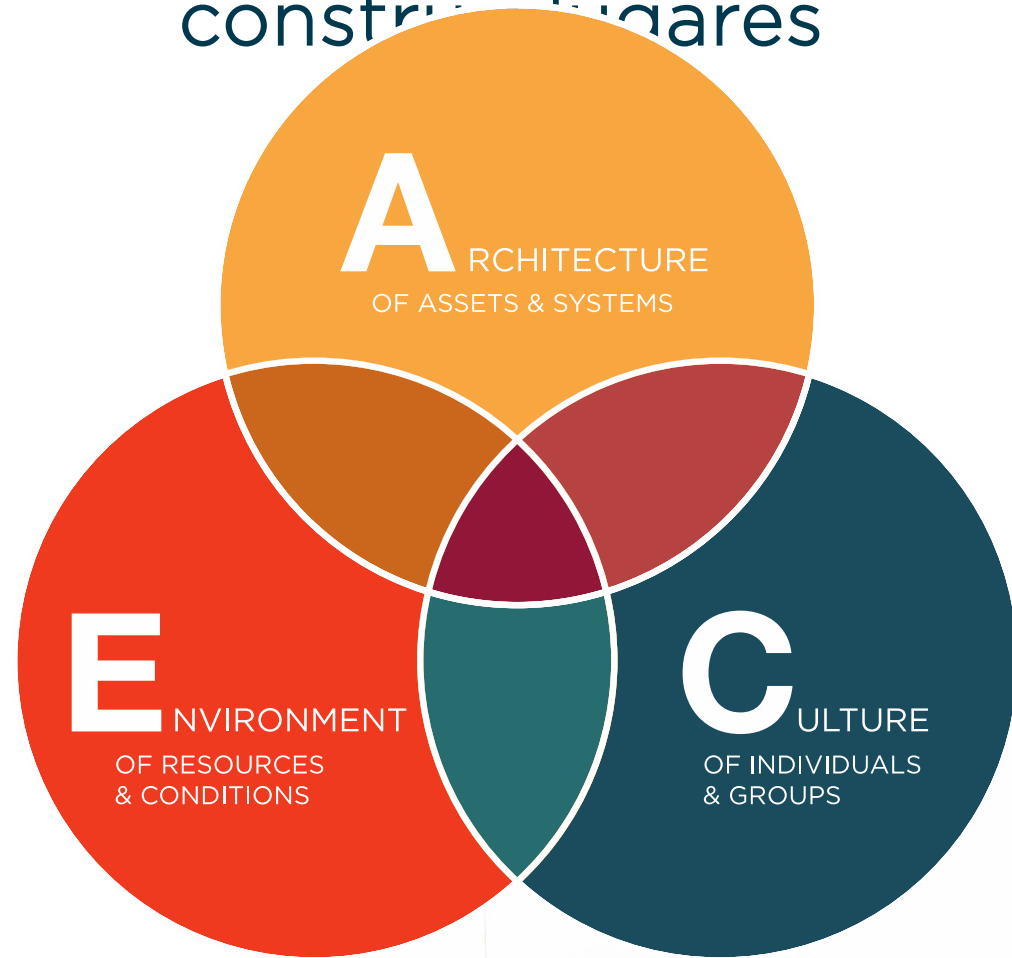
Resumen de la presentación

1. Introducciones
2. Cuestiones claves para el Distrito Escolar Unificado del Norte del Condado de Monterey (NMCUSD por sus siglas en inglés)
3. Acerca de MKThink
4. Nuestra propuesta de proceso
5. Casos de estudio relevantes
6. Resumen & discusión

Los problemas a resolver

- Las instalaciones no pueden acomodar la cantidad actual de estudiantes inscritos
- Instalaciones envejecidas en una era de estrés incrementado en los recursos físicos
- Hay que animar al público participante a apoyar las mejoras escolares
- Escasez de fondos para construir una salida al problema

Quiénes somos | un enfoque único y basado en la evidencia para construir lugares



Experiencia | conocimiento intersectorial + profunda experticia en educación primaria, media y secundaria (K-12 en inglés)

Robert Half
University of Santa Clara
University of Santa Clara School of Law
University of Santa Clara Business School
Stanford Law School
Stanford School of Medicine
Stanford Graduate School of Education
Stanford LBRE
Stanford Medicine: Lucile Packard Hospital
Stanford Management Company Children's
✓ San Francisco Unified School District
City of Dublin
City of Emeryville
City of Davis
✓ Emery Unified School District
Santa Clara Valley Water District
Sonoma County Library
Golden Gate University
WeWork
✓ Project Frog:
Scotts Valley USD Santa Ana USD
Fremont USD Long Beach USD
New Haven USD Redondo Beach USD
South SF USD Los Angeles USD
Oakland USD Jacoby Creek SD
Evergreen ESD National Parks Service

✓ Arlington Unified School District, VA
AltSchool
✓ Berkeley Unified School District
Hillbrook School
✓ Oakland Unified School District
Town School for Boys
UC Santa Cruz
Financial Engines
General Motors
Marin Country Day School
Midpeninsula Regional Open Space
Mozilla, Inc.
VMWare
The Nature Conservancy
Jupiter Communications
University of San Francisco
UC Hastings
UC Berkeley, Boalt Hall School of Law
✓ Hawaii Department of Education
University of Hawaii, Manoa
Occidental College
San Francisco Zoo
San Francisco SPCA

✓ Pre-K-12 Public School Districts

Experiencia | medimos nuestro éxito por el valor que desbloqueamos

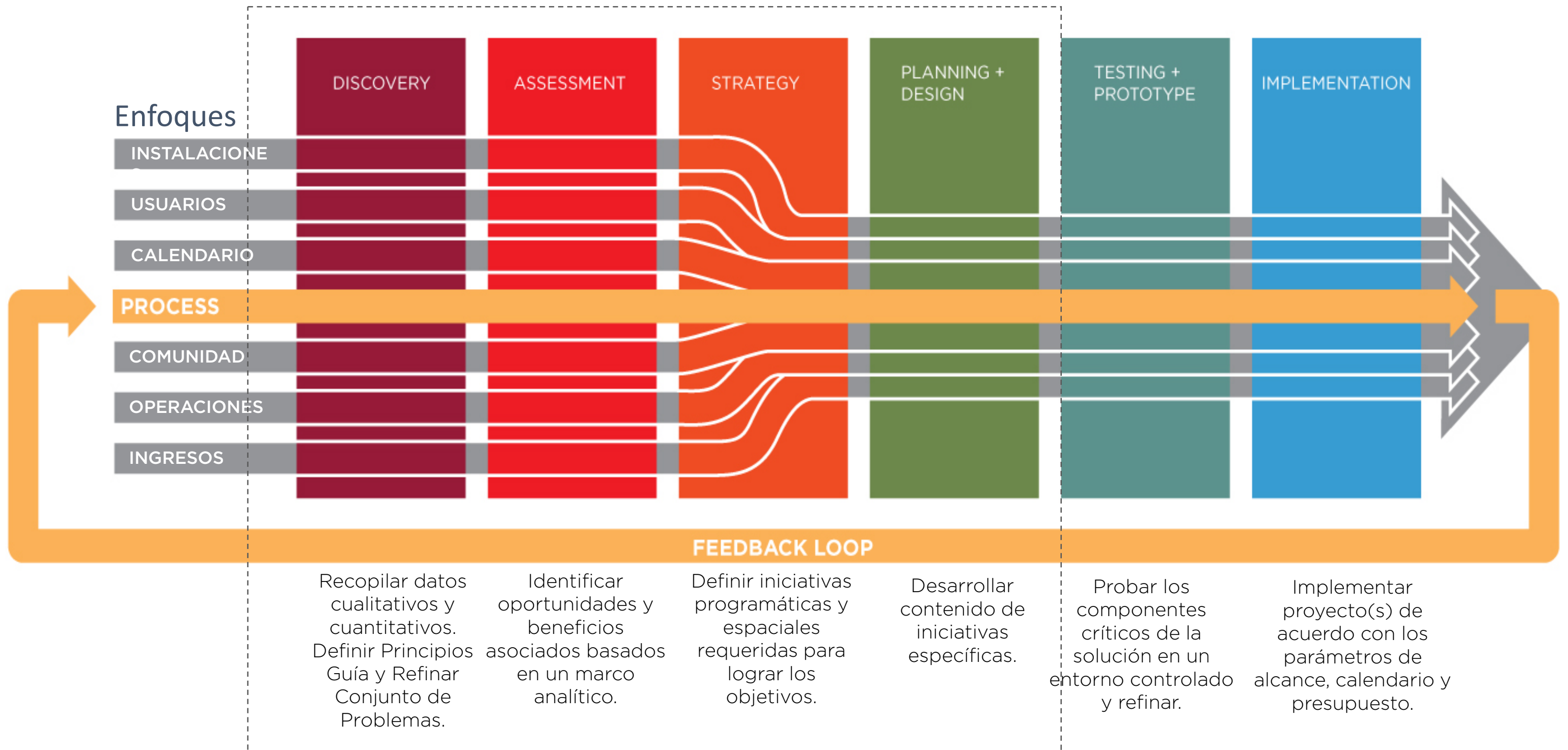
Institution

Hawaii Department of Education
Lucile Packard Children's Hospital
Oakland Unified School District
Santa Clara University
Stanford d.School
Stanford Graduate School of Business
Stanford University School of Law
The Nature Conservancy
Town School for Boys
Thomas Jefferson University Hospital
University of San Francisco
UC Berkeley School of Law

Result

Evitado **\$55M CapEx** | Ahorra **\$20M OpEx**
Evitado **\$12M CapEx** |por una edificio nuevo
Aligned **6.8M SF** | Ahorra **\$10M/year OpEx**
Evitado **\$25M CapEx** | Reducido **\$4M/year OpEx**
24% mas capacidad de estudiante| Perfil elevado
Plan maestro guiado **\$350M CapEx** proyecto y recaudación de fondos
10 años de servicios guiados **\$120M CapEx**
Ahorra **\$800k/year OpEx** | Espacio de trabajo con la marca de la misión
Evitado **\$36M CapEx** | 21st Century Teaching Tool
Evitado **\$10M CapEx** |por una edificio nuevo
Evitado **\$40M CapEx** |por una edificio nuevo
Evitado **\$18M CapEx** |por una edificio nuevo

Enfoque de MKThink | Un proceso integrado y consistente



Enfoque para el NMCUSD | Plan de trabajo para el Plan Maestro

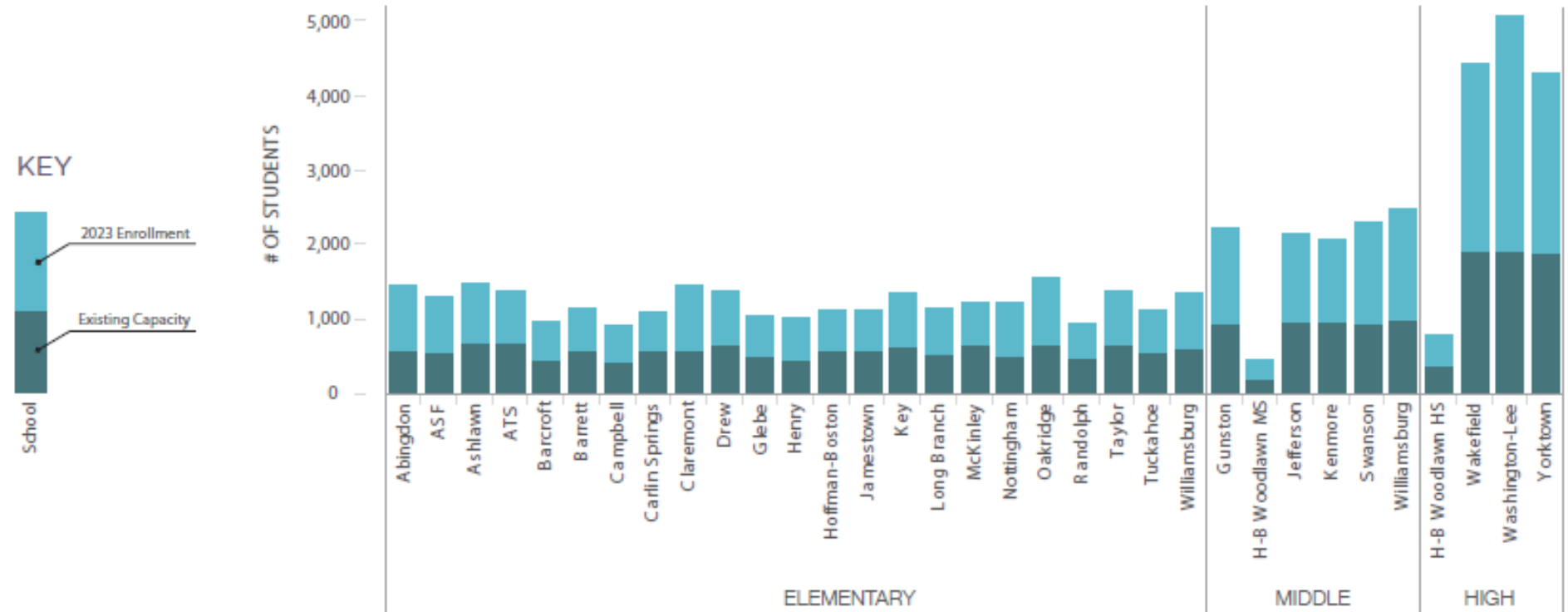
	DISCOVERY	ASSESSMENT	STRATEGY	PLANNING
1.1 MEET WITH DISTRICT FACILITIES COMMITTEE	Convene District Facilities Steering Committee, Goal & objective alignment			
1.2 a COMMUNITY OUTREACH	Engage community members on Facilities Master Plan process through in-person workshops & digital forums			
1.2 b DATA COLLECTION & GAP ANALYSIS	Assess completeness & logic of existing data & conduct gap analysis to ID any additional necessary outstanding data			
1.3 DEVELOP CONDITIONS (NEEDS) ASSESSMENT - CURRENT		Data collection & review process, evaluating existing site conditions, curriculum & educational goals of District		
1.4 DEVELOP CONDITIONS (NEEDS) ASSESSMENT - FUTURE		Assist with prioritizing short & long-term District needs, incorporating community needs & recommendations for repairs & upgrades, etc		
1.5 DEMOGRAPHICS & ENROLLMENT PROJECTIONS		Review & update demographic study with housing market & enrollment projections studies, & provide sizing recommendations		
1.6 CAPACITY & UTILIZATION STUDY & DETERMINATION OF ELIGIBILITY FOR STATE FUNDING		Perform school site capacity study, including facilities inventory. Provide recommendations on max site sizes, possible additions or new sites		
1.7 FACILITIES EQUITY STUDY		Analyze and compare teaching and support spaces between the school sites, determine need for changes or additions		
1.8 DEVELOP FUTURE FACILITIES NEEDS, ALTERNATIVES & ED SPECS			Assist in establishing educational specifications to reflect District's facilities standards & educational goals	
1.9 COST ESTIMATES			Identify and project all costs associated with recommendations	
1.10 PREP FINAL DIGITAL FACILITIES MASTER PLAN				Help prep final digital Facilities Master Plan to be uploaded to District's website & accessed by District's constituents.
1.11 FACILITATION OF FC PRESENTATION				Assist with facilitation of FC presentation/discussion of findings & recommendations to Governing Board in workshop setting
1.12 PRESENTATION TO GOVERNING BOARD				Assist with presentation of draft Facilities Master Plan to Governing Board for feedback prior to finalization & approval by Board

Escuelas Públicas de Arlington – Caso de estudio

Problema: Inscripción estudiantil proyectada excede capacidad en todo el distrito

EXISTING CONDITIONS OF ARLINGTON PUBLIC SCHOOLS

2023 Projected Enrollment vs. Existing Capacity of APS



It is estimated that:

HIGH SCHOOLS

will grow by 1,007 students in 2018, plus another 1,972 students by 2023

151% increase by 2023

MIDDLE SCHOOLS

will grow by 1,328 students in 2018, plus another 497 students by 2023

37% increase by 2023

ELEMENTARY SCHOOLS

will grow by 1,772 students in 2018, plus another 497 students by 2023

46% increase by 2023

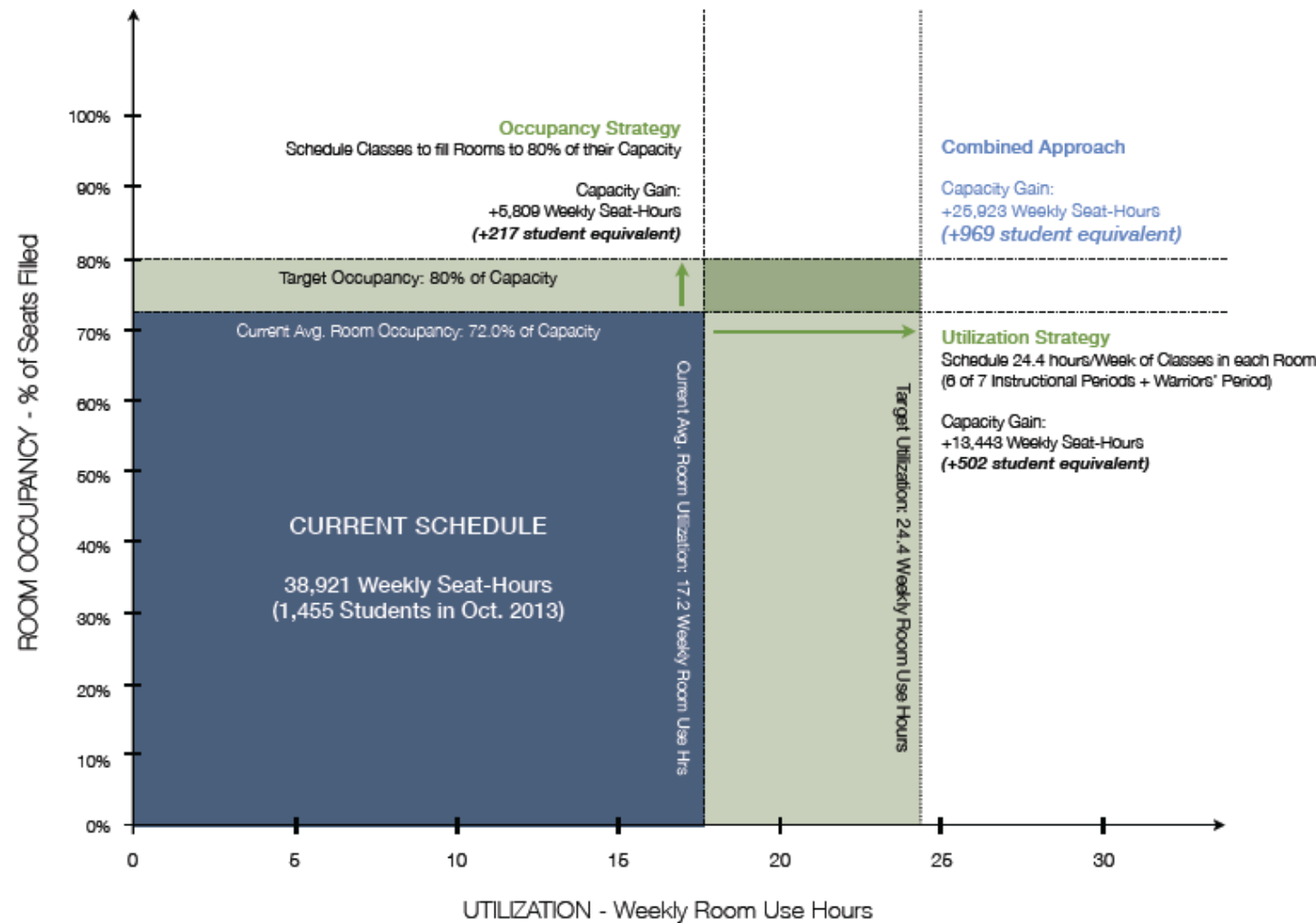
FOOTNOTE

Current and projected enrollment figures are based on the APS, Facilities Planning Report "Building Capacities and Projected Student Enrollment for School Year 2014-2023."

Escuelas Públicas de Arlington – Caso de Estudio

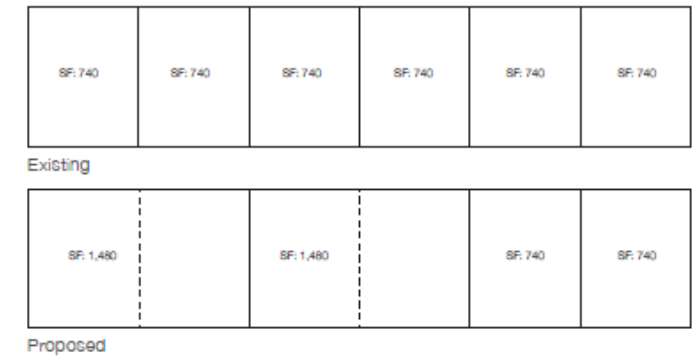
Estrategias de planificación y dimensionamiento

WAKEFIELD HIGH SCHOOL

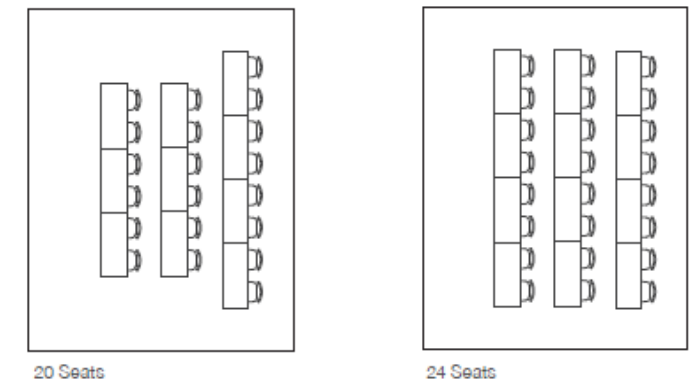


1. Presentar software de planificación
2. Capturar capacidad latente
3. Usar espacios adicionales

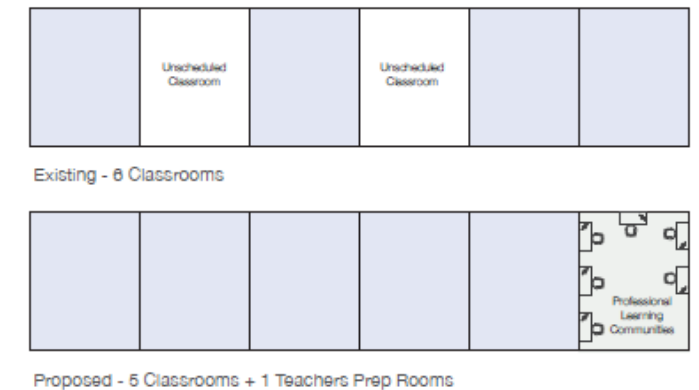
2A. Classroom Rightsizing: modify room size to better match class size



2B. Capacity Redefinition: adjust sf/student allocations to increase room capacities. This can be accomplished with the right furniture/technology that supports the learning environment.

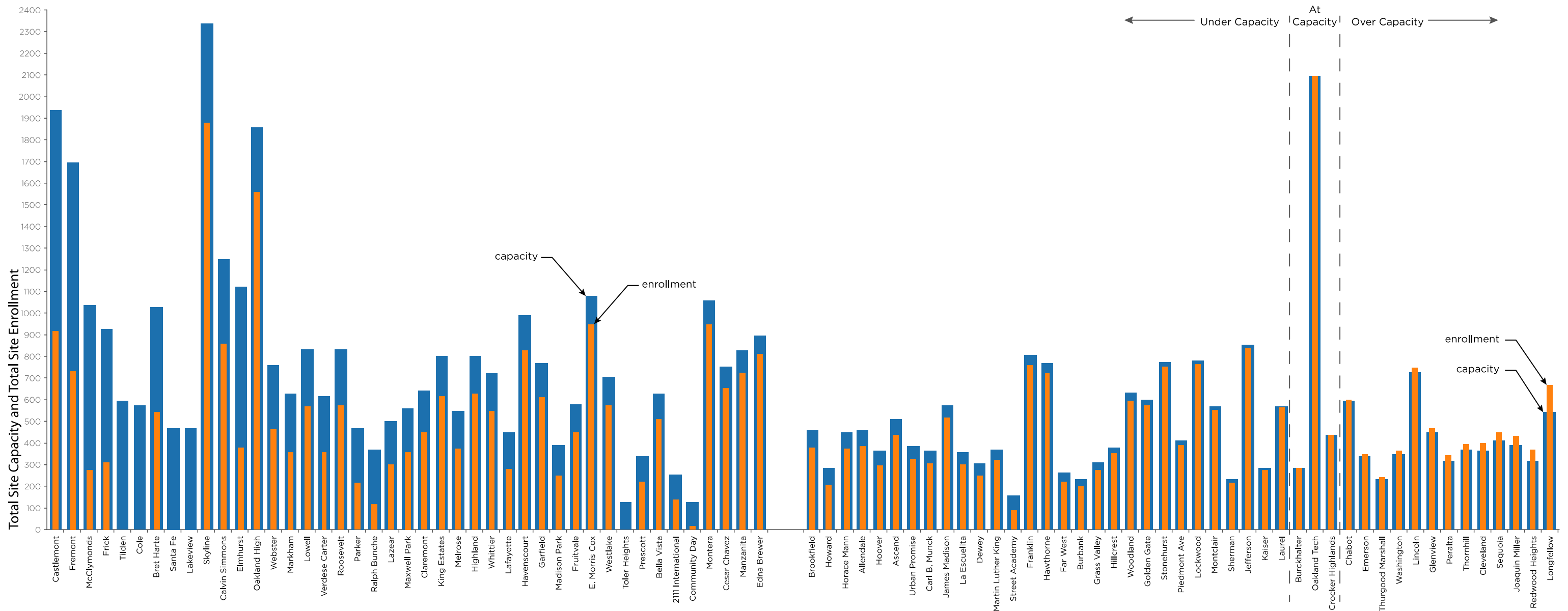


2C. Professional Learning Communities: provide collaborative teacher work areas for each professional learning communities, classrooms not associated with individual teachers enables higher utilization



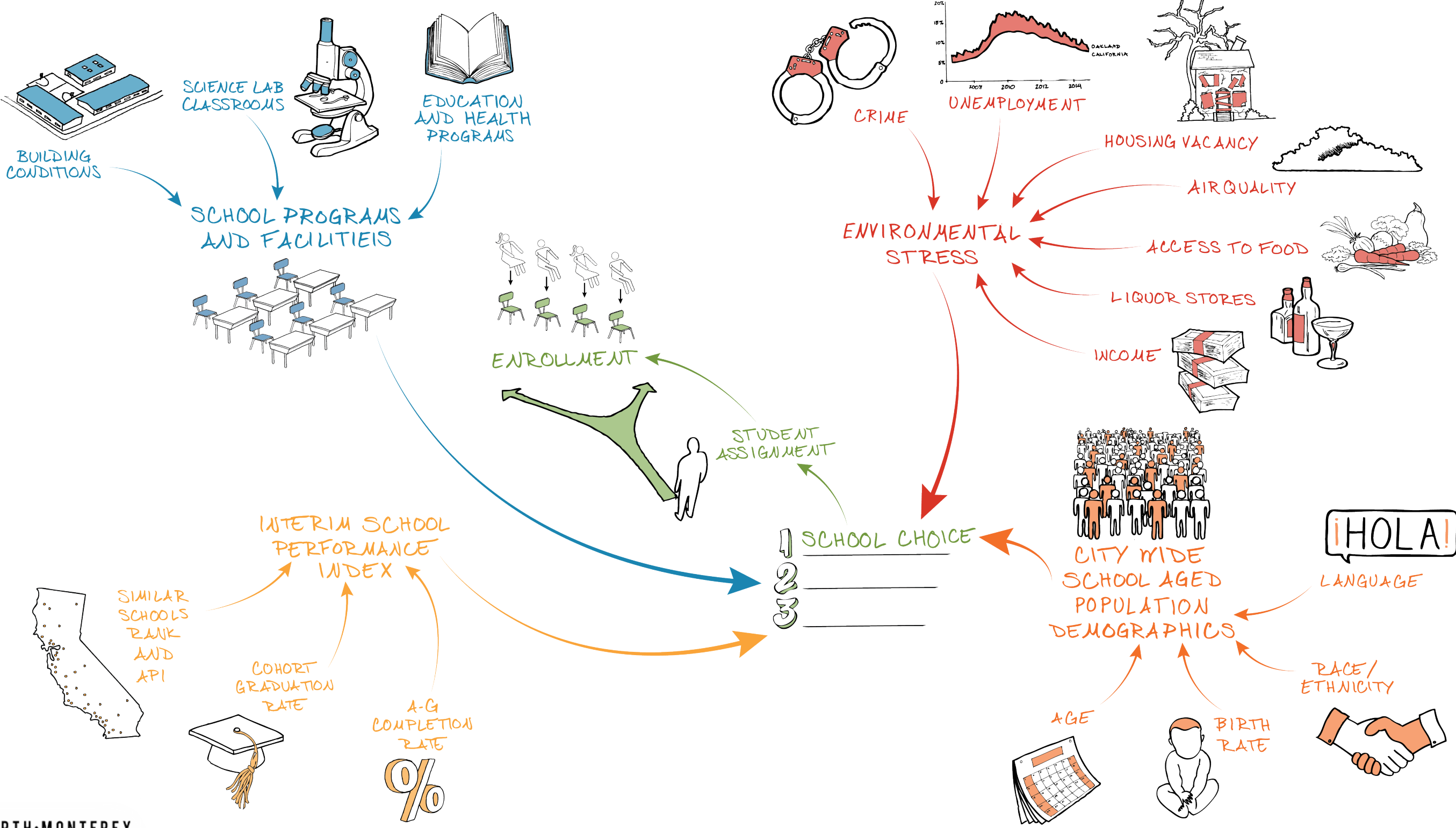
Distrito Escolar Unificado de Oakland – Caso de Estudio

Problema: Restaurar la confianza del votante y pasar un bono de \$600 millones con inscripción estudiantil en declive



Distrito Escolar Unificado de Oakland - Caso de Estudio

Evaluando el ecosistema cultural del DEUO



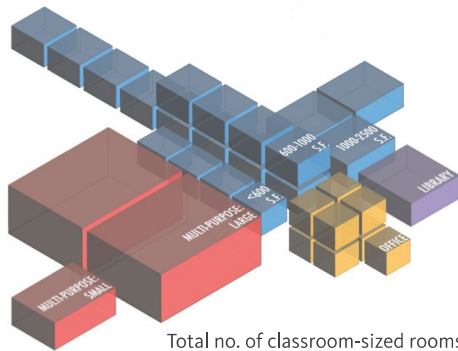
Distrito Escolar Unificado de Oakland - Caso de Estudio

Evaluando las características de las instalaciones

OUSD Facility Comparison Study

Loading Standards		
Current	25/28/30	Contract Max.
K-3: 20	K-5: 25	K: 27
4-8: 24	6-8: 28	1-3: 30
9-12: 27	9-12: 30	4-5: 31
		6-12: 32

Extra-small Elementary School



Total no. of classroom-sized rooms (including 3 specialty-use rooms)

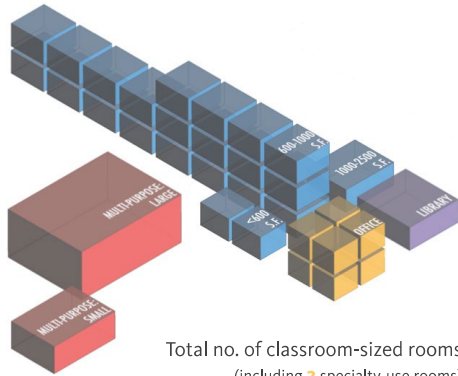
12

Grade	No. of classes (including split-level classes)	Current loading	Capacity at:	
			25/28/30 loading	Contract Max. loading
K	1.5	30	37.5	40.5
1	1.5	30	37.5	45
2	1.5	30	37.5	45
3	1.5	30	37.5	45
4	1.5	36	37.5	46.5
5	1.5	36	37.5	46.5
specialty-use	3	192	225	268

Total no. of students

Similar sites (11-14 rooms)
6

Medium Elementary School



Total no. of classroom-sized rooms (including 3 specialty-use rooms)

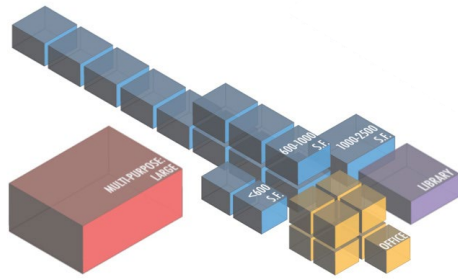
21

Grade	No. of classes (including split-level classes)	Current loading	Capacity at:	
			25/28/30 loading	Contract Max. loading
K	3	60	75	81
1	3	60	75	90
2	3	60	75	90
3	3	60	75	90
4	3	72	75	93
5	3	72	75	93
specialty-use	3	384	450	537

Total no. of students

Similar sites (21-28 rooms)
17

Small Elementary School



Total no. of classroom-sized rooms (including 3 specialty-use rooms)

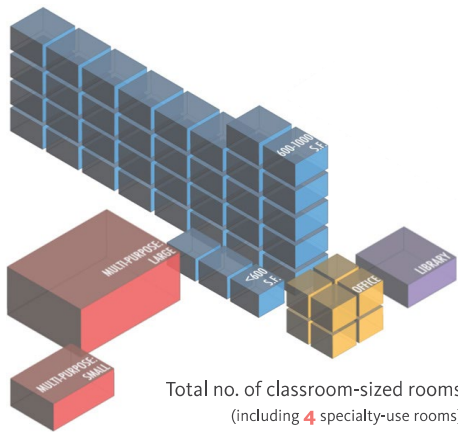
15

Grade	No. of classes (including split-level classes)	Current loading	Capacity at:	
			25/28/30 loading	Contract Max. loading
K	2	40	50	54
1	2	40	50	60
2	2	40	50	60
3	2	40	50	60
4	2	48	50	62
5	2	48	50	62
specialty-use	3	256	300	358

Total no. of students

Similar sites (15-20 rooms)
17

Large Elementary School



Total no. of classroom-sized rooms (including 4 specialty-use rooms)

34

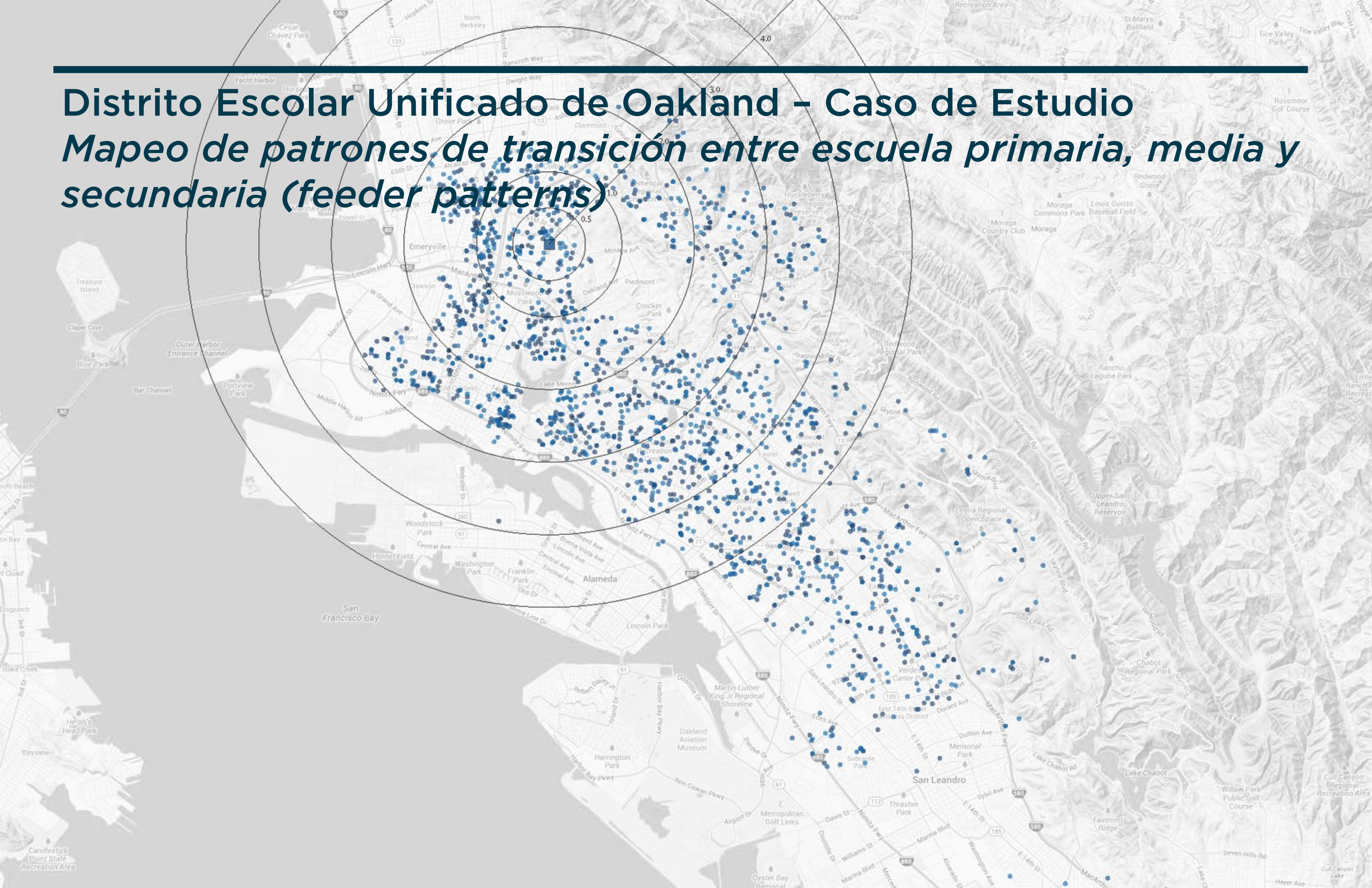
Grade	No. of classes (including split-level classes)	Current loading	Capacity at:	
			25/28/30 loading	Contract Max. loading
K	5	100	125	135
1	5	100	125	150
2	5	100	125	150
3	5	100	125	150
4	5	120	125	155
5	5	120	125	155
specialty-use	4	640	750	895

Total no. of students

Similar sites (29+ rooms)
19

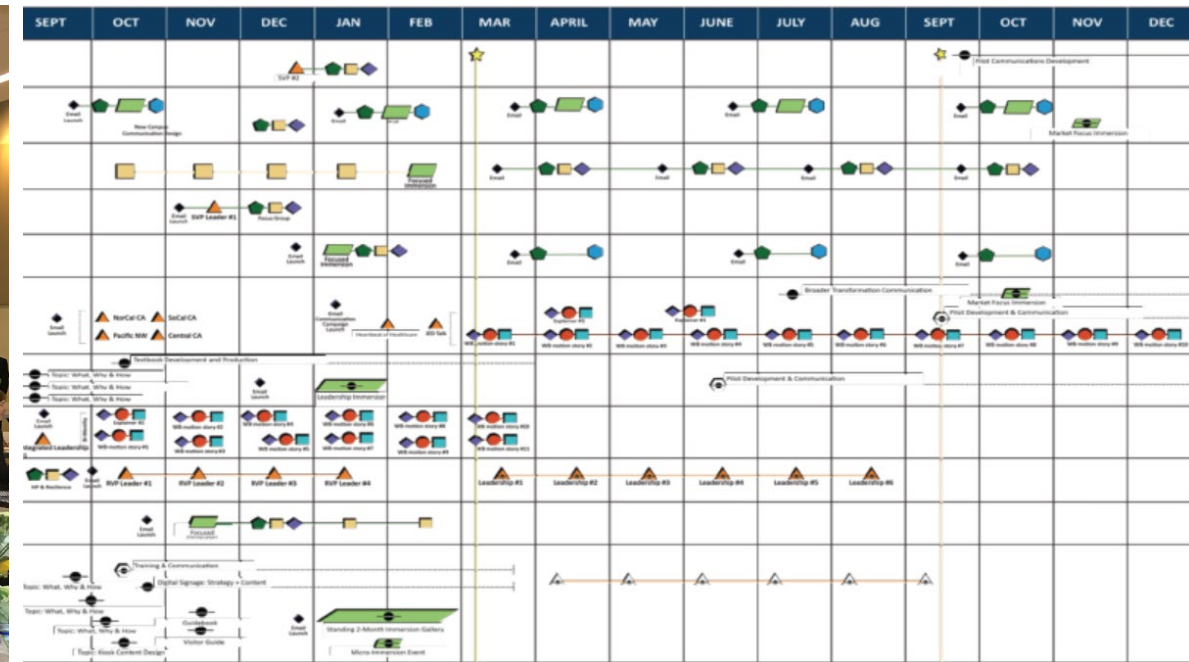
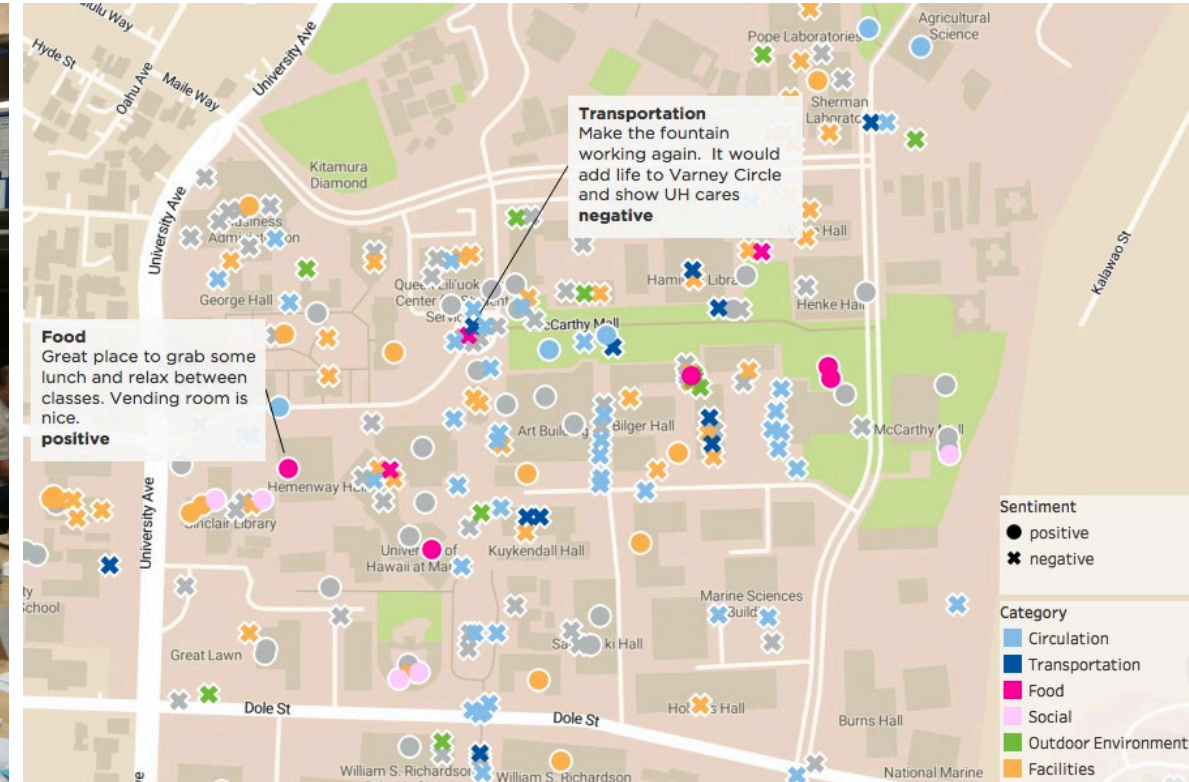
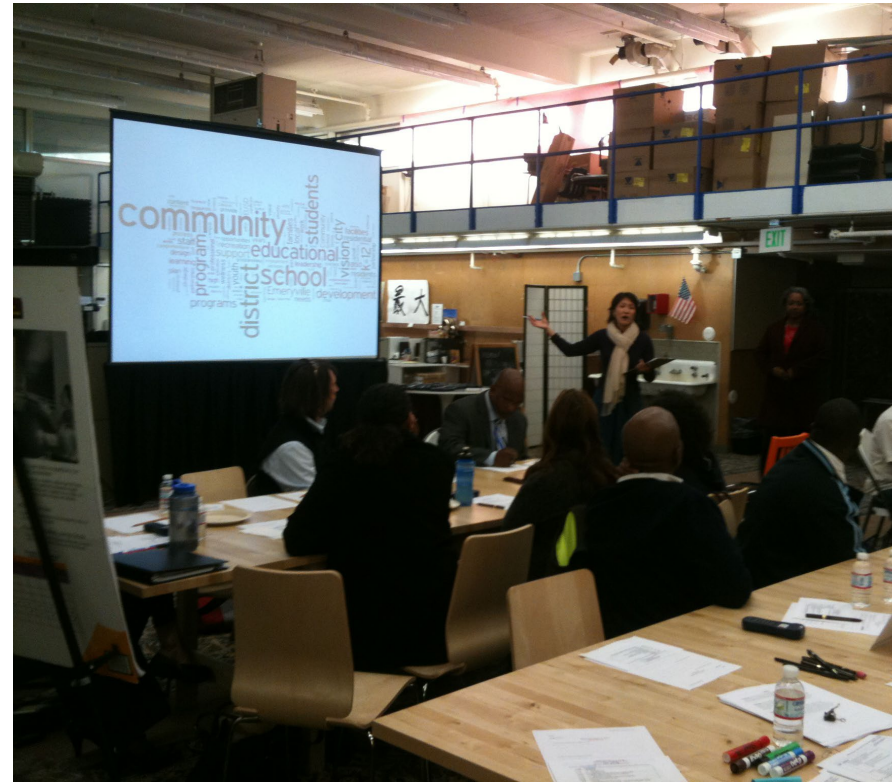
Distrito Escolar Unificado de Oakland - Caso de Estudio

Mapeo de patrones de transición entre escuela primaria, media y secundaria (feeder patterns)



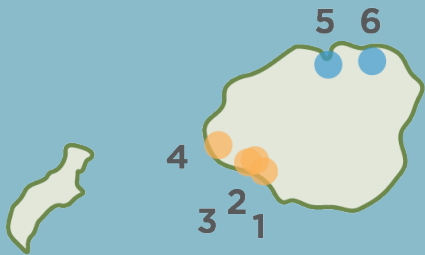
Distrito Escolar Unificado de Oakland - Caso de Estudio

Involucrando a la comunidad



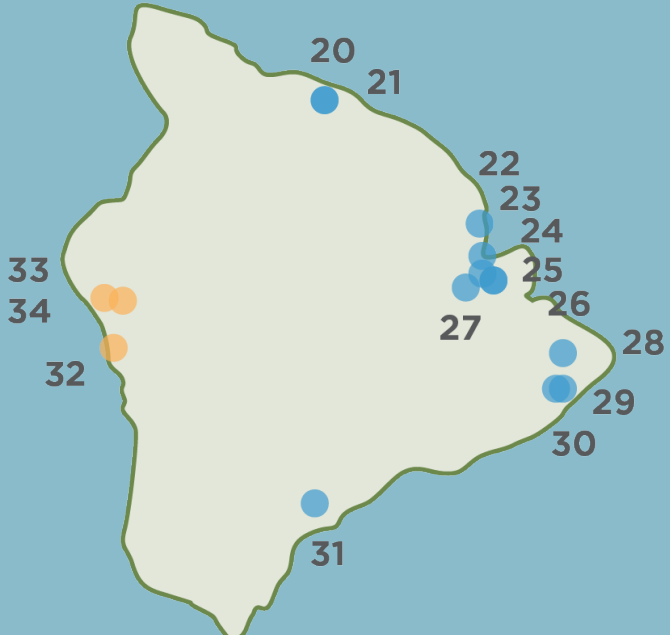
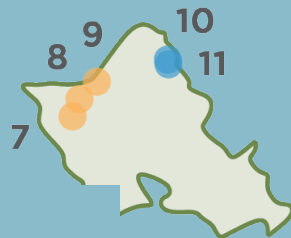
Departamento de Educación de Hawái: Caso de estudio

Problema: Enfriando todas las escuelas de Hawái por \$100M



KEY

- **Dry and Warm**
Annual Precipitation: 20-40 inches
Annual Average Minimum Temperature: 50-55°F
- **Rainy and Warm**
Annual Precipitation: 80-200 inches
Annual Average Minimum Temperature: 40-60°F



- | | |
|--|---|
| 1 Waimea HS | 18 Kamehameha III ES |
| 2 Niihau HS & ES | 19 Hana ES & HS |
| 3 Waimea Canyon MS | 20 Honokaa Int & HS |
| 4 Kekaha ES | 21 Honokaa ES |
| 5 Hanalei ES | 22 Kalanianaʻole ES & Int |
| 6 Kilauea ES | 23 Haaheo ES |
| 7 Waialua Int & HS | 24 Hilo Union ES |
| 8 Waialua ES | 25 Hilo Int |
| 9 Haleiwa ES | 26 Hilo HS |
| 10 Kahuku ES | 27 De Silva ES |
| 11 Kahuku Int & HS | 28 Keonepoko ES |
| 12 Molokai MS | 29 Pahoa Int & HS |
| 13 Molokai HS | 30 Pahoa ES |
| 14 Kaunakakai ES | 31 Kau HS & Pahala ES |
| 15 Lahainaluna HS | 32 Kahakai ES |
| 16 Nahienaena ES | 33 Kealakehe ES |
| 17 Lahaina Int | 34 Kealakehe HS |

FIND YOUR SCHOOL:

SCHOOL OVERVIEW

District	Leeward
Complex	Campbell
Climate Type	Arid
Site Acreage	-
# of Structures	-
# of Portables	-
total Gross SF	-
Building Typologies	Ribbon, Portable, Donut
Landscape Coverage	Grass, Asphalt, Concrete
Roof Color(s)	Black, Light Grey, Brown, White

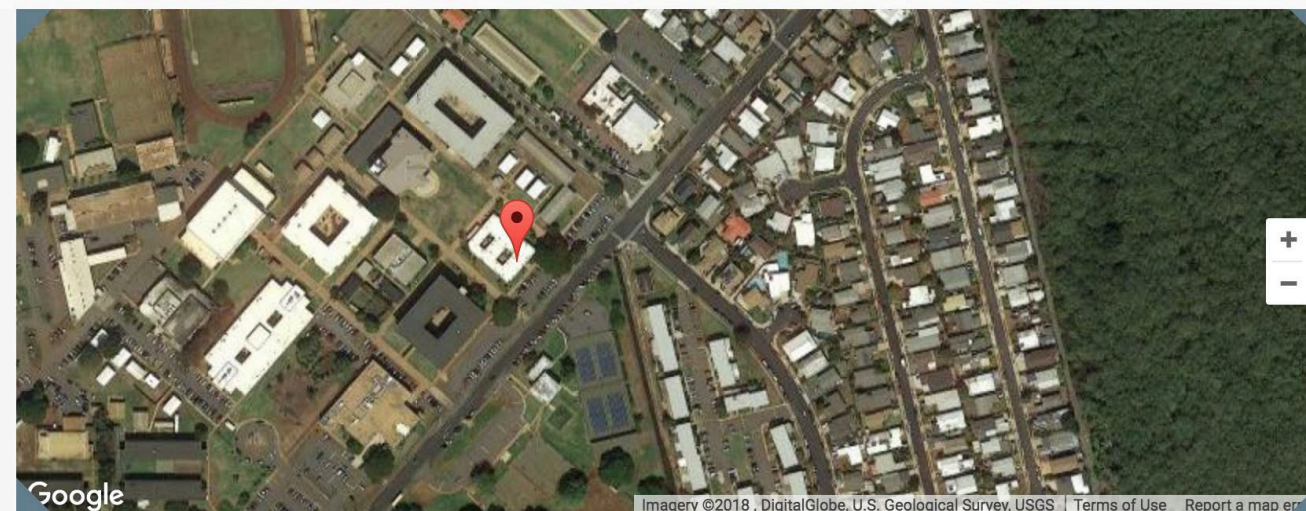
CURRENT WEATHER

@ **Kaimiloa Elementary** (0.43 miles away)
 Last Update : 2018/01/29 09:53

75.4 °F



Dew Point : **63.3 °F**
 Humidity : **66 %**
 Precip Rate : **0 in/hr**
 Precip Accum : **0 in**
 Solar Rad : **245.21 W/m²**



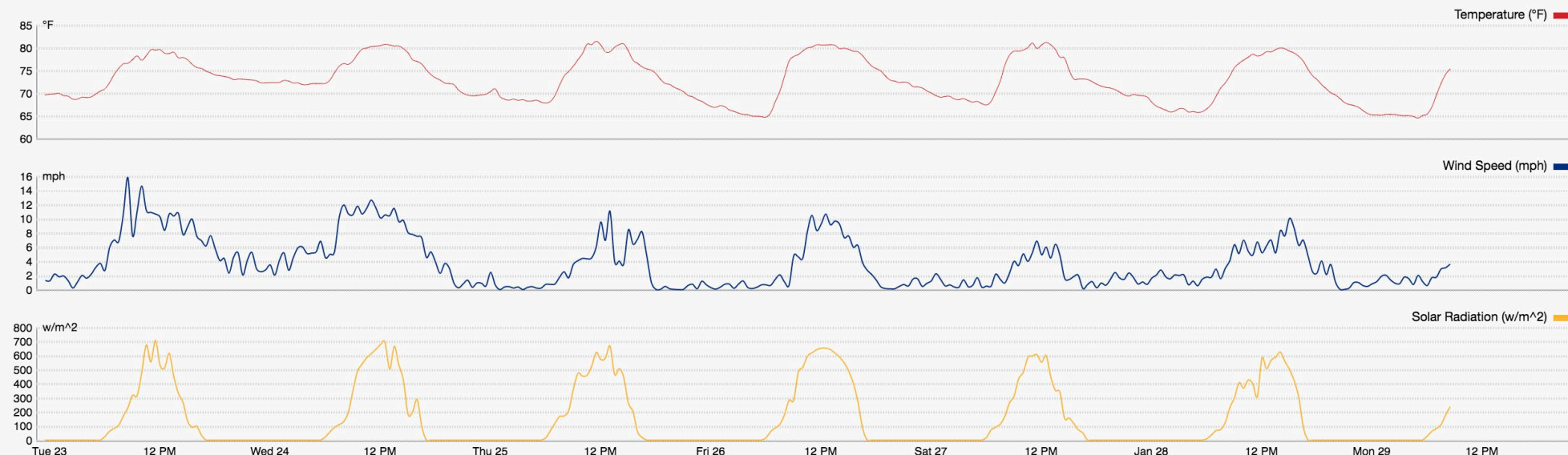
RECENT WEATHER

@ **Kaimiloa Elementary**
 (0.43 miles away)

Selected: 2018-01-23 to 2018-01-29

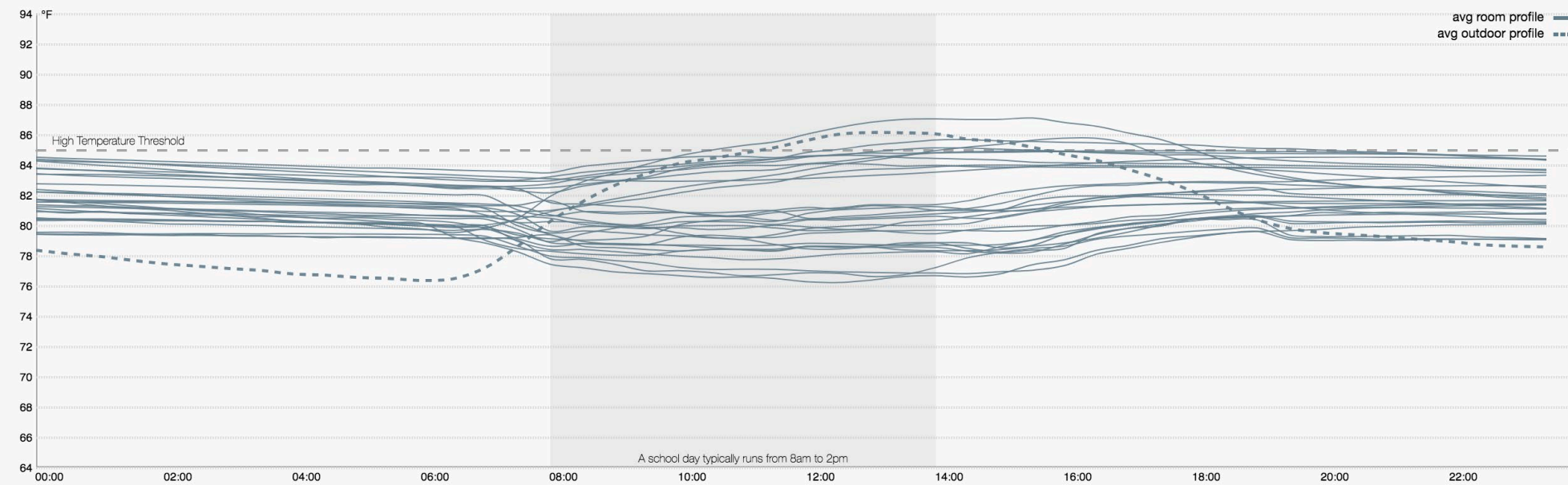
JANUARY 2018						
SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Download Selected Data



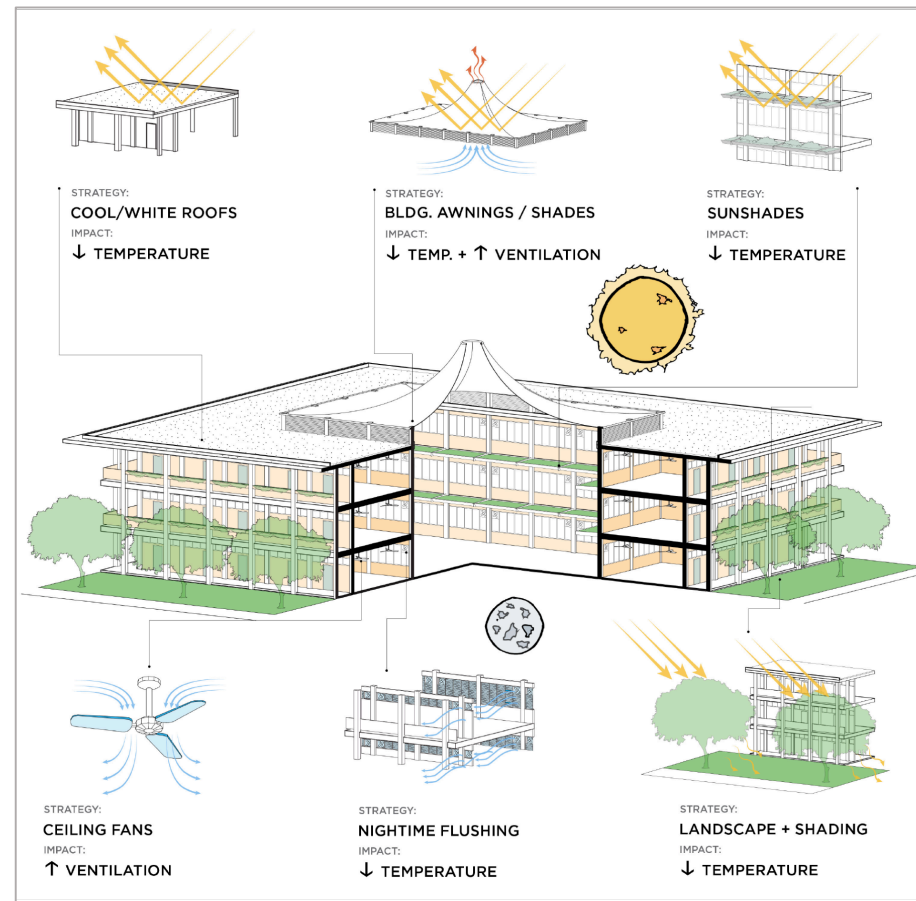
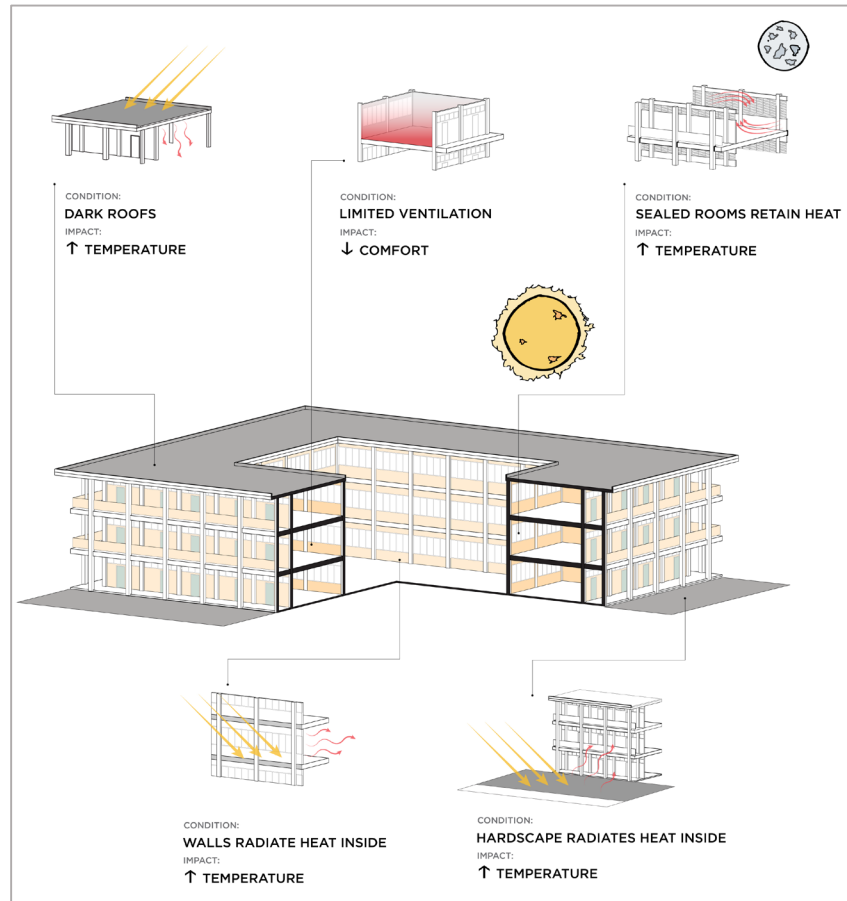
CLASSROOM TEMPERATURE PROFILES

Cafeteria E	Cafeteria N	Cafeteria S	Cafeteria W
D102	D105	D109	D112
D202	D203	D205	D207
D209	D210	D212	D302
D303	D305	D307	D309
D310	D312	DCourt	F2
J105	J109	N	N202
O102	O104	O105	O107
O201	O202	O203	O204
O205	O206	O207	O301
O302	O303	O304	O305
O307	O309	O310	OCourt E
OCourt W	P11	P19	P20
P7			

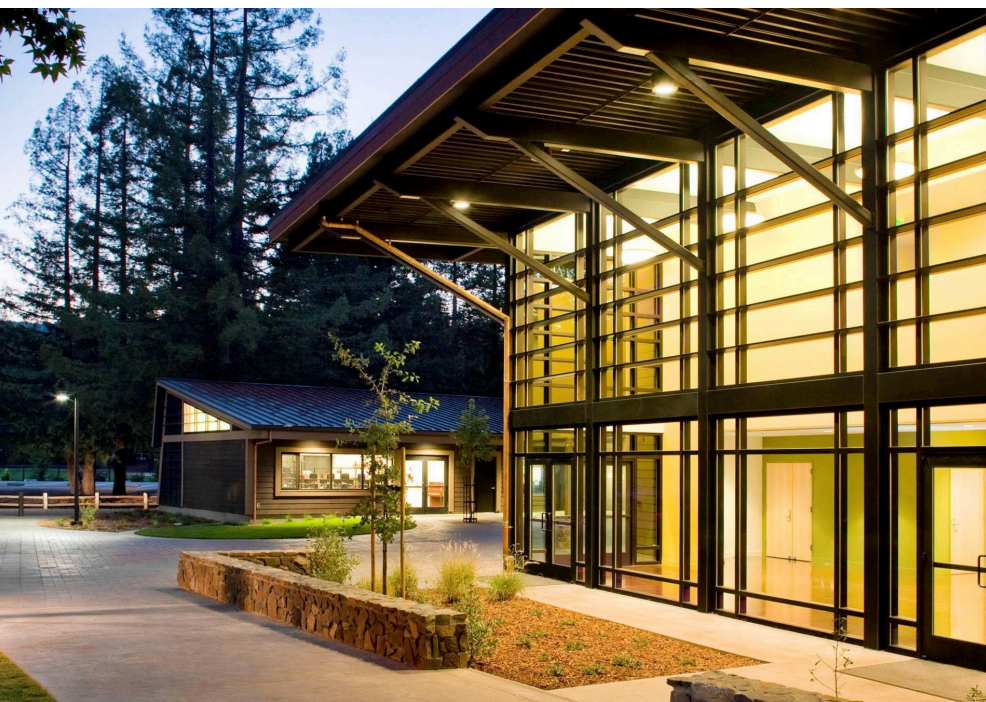


Departamento de Educación de Hawái: Caso de Estudio

Desarrollando Estrategias Rentables de Diseño Pasivo



Basado en una fuerte práctica arquitectónica



¿Por qué MKThink?

1. Resolvemos problemas, no proyectos
2. El proceso tradicional, enfocado en la arquitectura, ya no es una opción
3. Experiencia interdisciplinaria con profundo entendimiento de los entornos regulatorios y financieros K-12 en California
4. Un enfoque único, basado en la evidencia, centrado en la optimización de los resultados de los estudiantes y el personal docente
5. La integración de datos tanto cuantitativos como cualitativos contribuye a una verdadera comprensión de las cuestiones y a una mejor toma de decisiones
6. Compromiso para comprender y hacer participar a las partes interesadas de la comunidad
7. Historial comprobado de descubrir y aprovechar el valor oculto para nuestros clientes con ahorros significativos en los costos operativos y de capital
8. Compromiso a largo plazo con los clientes para llevar a cabo las iniciativas hasta su finalización