Live \ Work, Play

A regional strategy for workforce readiness and economic development
LWP vs LLWP

• Live, Work, Play¹:

A mixed-use sustainable community where a neighborhood market, restaurants, retail shops and a walk-to-work office community are combined with residential living and public gathering areas.

• Live, Learn, Work, Play²:

A mixed-use residential living area where school curriculum is aligned with the skill set needed to enter a surrounding industry thereby creating a neighborhood that retains its local graduates (reverse brain drain) through workforce readiness.

¹. Definition provided by Live, Work, Play Aiea. www.liveworkplayaiea.com
². Partial definition provided by Live, Work, Learn, Play. www.lwlp.com
School Complex Career Pathways

In spite of multiple and various efforts to improve student learning in Hawaii, the results have been varied and fractured. Industries and education are not aligned to produce workforce-ready graduates, resulting in graduates leaving Hawaii in search of better opportunities and employers outsourcing a large percentage of their workforce that should be dedicated to local employees.

The School Complex Career Pathways initiative is a holistic approach helping to engage and inspire our students with the effort concentrated within the school complex. In addition to “growing” a skilled local workforce, this initiative hopes to open the doors to the myriad possibilities that show our children that through a “good education” they can achieve their dreams. Whether they choose to remain at home or to move abroad, they will have the training and skills to live wherever they choose.

This template could be utilized for each regional school complex that can create or identify a local industry.
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Why: Schools and industries lack the precise alignment.

Who: Schools will have to identify the necessary partners.

What: School complexes must develop programs that will provide graduates options to enter the workforce or be college ready.

When: The timeline will depend on the situation of the industry.

How much: Funding will be needed to retrofit facilities and develop curriculum.
1. Demonstrated Needs

Justify the demonstrated needs through community trends
Hawaii’s statistics are alarming. Students need options other than college-prep curriculum. The curriculum should ensure all graduates have an equal opportunity for employment—to pivot from high school to career.
Ranking School Systems

A recent study found that Hawaii ranks 37th overall in education systems despite ranking 17th in spending.

Source: WalletHub
Statistics show that Live, Work, Play communities rarely exist except in Urban Honolulu and military communities. Hawaii must create economic industries outside of the urban core to reverse the brain drain, provide economic development, and sustain communities.
The Cities Americans Are Ditching

Of the 100 most populous metro areas in the U.S., these 20 lost the highest share of their residents to other parts of the country.

Source: Bloomberg analysis of U.S. Census data
2. Identify or Create.

Identify or create industry in region that encompasses a high school and feeder schools.
Identifying the industry within a region: Leilehua Complex has identified the National Security Agency (NSA) as a career pathway.
Leilehua Complex Whitmore Project

Creating the industry within a region: Leilehua Complex will create the Whitmore Project as an agribusiness and ag-tech career pathway.
Waipahu Complex
HART Rail Operations Center

Identifying the industry within a region: Waipahu Complex has identified the Honolulu Authority for Rapid Transportation (HART) as a career pathway.
Waipahu Complex
QMC West Oahu

Identifying the industry within a region: Waipahu Complex has identified the Queens Medical Center – West Oahu (QMC) as a career pathway.
3. Engage.

Engage leaders and discuss employer needs and industry requirements for employment.
Silos to Synergy

• The engagement of diverse backgrounds will break administrative silos

• Government, industry, and education must be aligned to ensure Hawaii’s graduates have viable opportunities

• Assess, Create, and Identify industries and schools to produce a live, learn, work, play community
Hawaii Coffee Co.

- Hawaii Coffee Co. needs 50 employees that are equipped with the skill sets that they are seeking
- Skilled Workers (Fabrication, Processing, Tech-Savvy)
- Teamsters Local 996 job opportunities (living wages, medical coverage, pension)
- Outsourcing of employment
- Partner with HIDOE to provide students with workforce training dedicated to necessary skills
- No alignment for educational curriculum and industry needs
- High Value Certification or Non-credited workforce skill curriculum
- Post-secondary education not needed
High school complexes must realize that not all graduates will have the financial viability or interest to continue on to college. School complexes must partner with state agencies, the state legislature, and the local industry to prepare our graduates for career readiness.

"Waipahu High has become the pipeline between the student clientele and the industry. We strive to have our students ready for careers."

- Keith Hayashi
  Waipahu High School, Principal
4. Assess.

Assess capacity at school and complex.

Internal Capacity

Physical Facilities

High school complexes must assess three critical categories: (1) whether or not the school has the capacity to develop industry partnerships and curriculum alignment; (2) if the infrastructure meets the needs for the career pathway.
There are three positions that are essential to implementing this program; a community engagement specialist & K-12 STEM curriculum specialist who will be under the Complex Area Superintendent, and a resource manager who will be under the school principal. An alumni community association will be needed to facilitate grant opportunities that the DOE cannot leverage.
Internal Capacity
Alumni and Community Association

• Alumni and Community Associations (ACA) are 501(c)3 nonprofits created on the basis of raising funds to support schools.

• An ACA gives programs the option to seek grants

• This intermediary component becomes essential to all school complex career pathways.

• Duplication of ACA model

• The ACA will assist all feeder schools
Assessing the complex pathway:

- Arts & Communication
- Business
- Health Services
- Industrial and Engineering Technology
- Natural Resources
- Public and Human Services

Principals are attempting to house all six pathways in their schools. Schools should focus on an academy that compliments the surrounding industry.
5. Develop & Align.

Develop precise alignment to workforce readiness.
Keiki to Career Curriculum

• This curriculum will establish a year-round program for high school and post-secondary students incorporating science, technology, engineering, and mathematics so students are prepared in the Agribusiness Technology; Cyber Security & Data; Healthcare; and Information Technology in the Industrial Engineering Technology Pathway and are ready to succeed both in and out of school.

• Hawaii’s STEM/IT industry stands to provide 64,000 jobs.
Curriculum & Pivot Points

We need to identify/align the career and its pivot points. Once aligned, you can pin point areas in the education pipeline where the student can transition from education to career. Currently, the model is too focused on college readiness and continuing education.

**NSA Careers:**
- Computer Science
- Computer/Electrical Engineering
- Mathematics
- Foreign Language
- Intelligence Analysis
- Cryptanalysis/Signals Analysis
- Information Assurance
- Installation & Logistics
- Business
- Security
- Others
Workforce Strategy

K → 5th Grade
- Hands on investigations for self interest
- Personal judgments and decision making
- Collaboration & team work-systematic problem solving (design process)

6th → 8th Grade
- Design process problem solving (design process)
- Project based learning tied to the community
- Self application to real world problems
- Collaboration with leadership roles

9th → 12th Grade
- Student driven problem solving (design process)
- Project based learning using evaluation techniques
- Self innovation in designing solutions to real world problems
- Complex learning in a collaborative setting
Professional Teachers & Professionals Teaching

Professional Teachers

• Professional teachers have been trained in teaching methods to assist in imparting knowledge to students
• BEd/EdM

Professionals Teaching

• Teaching professionals are subject matter experts in their particular areas of research
• MD/PhD

Oversight by the department’s certified educator and a volunteer expert will facilitate co-teaching opportunities exposing students to professionals that can provide them in-depth training and knowledge (i.e. foreign languages).
Hawaii 3 to 6

Senate Concurrent Resolution 185

Requesting the Department of Education to organize and coordinate out-of-school programs for kindergarten through twelfth grade, and identify funding opportunities for current and future Department of Education out-of-school programs

- Hawaii 3 to 6 will be the comprehensive out-of-school program that will be used to fund K-12 out-of-school programs. Through expanded funding, Career & Technical Education will work on student workforce readiness, facilitate internships, and prevent students from participating in risky behaviors
Career & Technical Education

CTE:
• Hawaii 3 to 6 will provide funding to expand CTE opportunities
• Diversify programs by including vocational training as an out-of-school program
• Align CTE curriculum to industry needs
• Credit recovery program
• Internships, job shadowing, mentorships
• Out-of-school co-teaching program
Dual Credit & Jump Start

**Dual Credit Program**

Statewide program between the University of Hawaii and the Dept. of Education that provides an opportunity for academically qualified high school students to enroll in college classes through the UH system as part of their high school coursework.

- Available to grades 9 – 12
- Scholarship opportunities for low-income students
- Guarantees both high school and college credits

**Jump Start Program**

Partnership between GEAR UP, the University of Hawai‘i (UH) and the Department of Education (DOE) to provide qualified seniors early access to vocational/technical education opportunities on a college campus. Students take coursework that fulfills requirements for a two-year college degree as well as their high school diploma.

- Establishes a ready workforce
- Provides options for students who want to enter the workforce

Develop school campus facilities plan to reflect pathway focus.
Campus Facilities

• Retrofit old schools & master plan new schools to the complex career pathway

• Schools should be constructed to have different “houses” of career pathways

• Industries will invest if pathway produces a ready workforce
21st Century Schools

Rejuvenation & Sustainability

• Session Laws of Hawaii 2013, Act 155
• Optimizes the use of public school lands to generate opportunities to improve public school facilities and infrastructure to meet the challenges of the twenty-first century and to improve the overall quality of education in Hawaii
• Generate revenue from uses for public purposes, such as workforce housing, to build and retrofit twenty-first century schools and create more school-centered communities.
7. Identify.

Leilehua High Partners: NSA; Whitmore Project; First Responder’s Technology Park; Pacific Institute on Technology & Aging
Recognizing that NSA as identified career pathway, Leilehua High School should partner with NSA, DOE, University of Hawaii, Chaminade University, DBEDT, and DLIR to align the curriculum to industry needs. By partnering with private and public entities industries will eliminate siloes that have stifled economic growth and job creation in Hawaii.
Curriculum Non-Alignment

<table>
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<tr>
<th>DOE Languages</th>
<th>Leilehua Language Electives</th>
<th>NSA Foreign Languages</th>
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NSA’s foreign languages should be the basis of all foreign language courses offered at Leilehua. The current electives do not reflect the surrounding industry.
Education & Workforce
(Comprehensive Strategy)

**Phase I**
**Short Term**
- **June – December 2015**
- June: Meet with legislators
- July: Establish Standing Working Group Committee
- July: Gov release funds for LACA
- July: Assign tasks, benchmarks, deadlines
- July - December: Finalize course curriculum for Curriculum Brochure

**Phase II**
**Mid Term**
- **January – July 2016**
- January: Students select courses for School Year 2016
- July: 1st QTR begins – Students Grades 9 – 12 actively engaged and studying curriculum

**Phase III**
**Long Term**
- **July - 2016+**
- July: Align curriculum for K – 5th Grade / 6th – 8th Grade
## NSA Programs

<table>
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<tr>
<th>Programs</th>
<th>Pivot K - 12</th>
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<tr>
<td>Cooperative Education Program</td>
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<td>✓</td>
<td>✓</td>
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</table>

*80% of NSA program participants return for permanent employment after college graduation, the other 20% are recruited by other intelligence and defense agencies (i.e. Dept. of Homeland Security, FBI).

- High School Interns GS-2 Security Clearance
- College Interns GS-6 Security Clearance
Computer Science, Engineering and Mathematics

Opportunities:

• Computer Science
• Computer/Electrical Engineering
• Mathematics
• Technical Skills
• Information Assurance
• Signals Analysis
• Cryptanalysis
• Collection
• Development Programs
High School Work Program

Available HSWS Positions:

• Office Assistant
• Computer Aide
• Vo-Tech
• Model Shop
College Internship Programs

- Summer Intern Program for Science and Technology (SIP/ST)
- Director’s Summer Program (DSP)
- Cryptologic Access Summer Intern Program (CAP)
- Installation & Logistics (I&L) Intern Program
- Cryptanalysis and Exploitation Services Summer Program (CES/SP)
- Graduate Mathematics Program (GMP)
- Intelligence Analysis Summer Program
- CAE in Cyber Operations Summer Intern Program
- Summer Intern Program for Informational Assurance (SIP/IA)
- Computer Science Intern Program (CSIP)
- Summer Language Program
- Summer Program for Operations Research Technology (SPORT)
- Cyber Summer Program (CSP)
- Human Resources (HR) Intern Program
- Occupational Health, Environmental and Safety Services (OHESS) Intern Program
Stokes Educational Program

Qualified Career Fields:
• Computer Science
• Computer or Electrical Engineering
• Geared towards minority students

Benefits
• Paid Tuition up to $30,000 per year
• Year-round salary
• Agreement to work for NSA for at least one-and-one-half times the length of study upon graduation
Cooperative Education Program

- Electrical or Computer Engineering Majors
- Computer Science Majors
- Rotational program as full-time employee and full-time student from entry into the program until graduation
  - 52 weeks of co-op work experience
  - 40-hour weeks
- Competitive Salaries determined by the percentage of credits completed toward a degree
NSA Hawaii Workforce

- 80% Military
- 20% Civilian
NSA Hawaii Employment

NSA Hawaii has recognized that outsourcing workforce results in frequent turnovers. This culture will be changed by recruiting local employees for extended periods.

- 3000 employees
- 80 vacant positions

NSA Hawaii also recruits high school and community college/university interns.

- 13 high school interns
- 24 university interns
- Minimum of 20 hours per week
- Vets 75-100 for high school interns
- Vets 100+ for university interns
Hawaii Business Roundtable & Hawaii State Teachers Association Internships

- 12 teacher internship positions
- 3 to 5 day internships

- Intelligence Community
- Teachers with education professionals on leadership (DRIVE)
- Focus on security briefings (including STEM and cryptology)
8. Identify.

Waipahu High School: Honolulu Authority for Rail Transit; Queens Medical-West Oahu
Recognizing the HART Rail Operations and Queen’s West Oahu as an existing career pathways, Waipahu High School should partner with HART, Queen’s, DOE, University of Hawaii, DBEDT, and DLIR to align the curriculum to industry needs. By partnering with private and public entities industries will eliminate siloes that have stifled economic growth and job creation in Hawaii.
HART Rail Operations Center
Transit Services

• Operations & Servicing
Monitor and control all the rail transit vehicles as they move through the system, stations, and the rail operations and control center

• Maintenance of Way
Inspect and repair the guideway, stations and track

• Train Wash
Operating the train wash facility that will be used to clean the exterior of the rail vehicles

• Wheel Truing
Maintenance of vehicle wheels
Service

- 80 Railcars
- 40 Miles of Track
- 21 Stations
- East Kapolei to Ala Moana
- Stations w/ Parking
- 4a – 12a Weekdays*
- 6a – 12a Weekends*

Operations

- 300 +/- Employees*
- 12 Departments
  - Safety, Health & Environment
  - Customer Service
  - Operations
  - Maintenance of Way
  - Railcar Maintenance
  - Systems Maintenance
  - Operations
  - Customer Service
  - Information Technology
  - Human Resources
  - Engineering
  - Finance
"The commitment from Ansaldo Joint Venture is that 99 percent of the employees that will be working at this site in the future, (and) the 300 or so people who will actually work across the system, will be local people."

- Dan Grabauskus
HART, Executive Director & CEO
HART needs over 200 employees for its operations and maintenance departments by 2018.
Queen’s West Oahu

Facilities:

- 10 ICU beds
- 40 Telemetry beds
- 30 Medical/Surgical beds
- 4 Operating Suites
- 2 Endoscopy Suites
- 23 Emergency Department bays

- 500-employee force
- Over 50% live within the area
Queen’s West - Workforce

Employee Composition

- Nurses, Physicians: 60%
- Patient Services: 30%
- Other: 10%
“The demand has always been there and, with the population growing, we expect to see more. We’ll need to get more staff, and we’ll use flyers. There is a nursing shortage, and a skill-set shortage of specialty needs, including critical care, emergency room, surgery and behavioral health.”

- Art Ushijima
The Queen’s Health Systems, CEO
9. Create.

Future Partnerships
Creative Media Complex → Waianae High School

Creating an Industry

• Waianae Seariders Production
• Waianae High School and UH West Oahu cultivate students with talents in creative media, but Hawaii lacks a vibrant film industry. Similar to the Whitmore Project, a Film Media Technology Campus could be created on vacant state property as a new industry in West Oahu.
• A new industry could be born in Oahu’s second city
• Live, Learn, Work, Play will truly be achieved in West Oahu
NELHA → Kealakehe High School

Identifying an Industry

• NELHA is an ocean-research and commercial facility that serves as a tech park for more dozens of businesses, including some of the state’s most cutting-edge renewable energy and aquaculture projects.

• 52% of the Kealakehe’s student body is categorized as being economically disadvantaged

NELHA produces $100 million for Hawaii’s economy and is capable of employing over 600 employees.
10. Attract Investment.

Attract Funding Opportunities with Private Partners
Private Sector Investment

- The State lacks funding to maintain or retrofit its antiquated campuses
- Private sector buy-in is critical to program development
  - Donors
  - Social Organizations
  - Curriculum Development
  - Facility Modernization

Investment into our education system will always improve program development, facilities, and most importantly provide jobs for our local graduates.