ALOHA STADIUM
Planning For A New Stadium & Site Redevelopment
D.A.G.S. Job No. 12-10-0862
Phase I
Final
1. Executive Summary
2. Reference Data Maps of Honolulu
   a. Population Density Map
   b. Land Ownership Map
   c. Hazard Zones Map
   d. Scenic/Scenic Zones Map
   e. Incentive and Employment Map
   f. Transportation Map
3. Site Selection Process
   a. Map of Proposed Sites
   b. Site Selection Matrix
   c. Desktop Reviews
   d. The Workbook
4. Summary of Site Evaluation
5. Proposed Sites for Analysis
   a. Halawa Site
      i. Halawa Site Description
      ii. Halawa Site Isochrone & Site Map
      iii. Halawa Site Visit Pros & Cons
      iv. Halawa Test Fits
      v. Halawa Site Analysis
   b. University of Hawaii At Manoa
      i. Manoa Site Description
      ii. Manoa Site Isochrone & Site Map
      iii. Manoa Site Visit Pros & Cons
      iv. Manoa Test Fits
      v. Manoa Site Analysis
   c. University of Hawaii At West Oahu
      i. West Oahu Site Description
      ii. West Oahu Site Isochrone & Site Map
      iii. West Oahu Site Visit Pros & Cons
      iv. West Oahu Test Fits
      v. West Oahu Site Analysis
   d. Ala Wai Golf Course
      i. Ala Wai Site Description
      ii. Ala Wai Site Isochrone & Site Map
      iii. Ala Wai Site Visit Pros & Cons
      iv. Ala Wai Test Fits
      v. Ala Wai Site Analysis
   e. Kapolei Regional Park
      i. Kapolei Site Description
      ii. Kapolei Site Isochrone & Site Map
      iii. Kapolei Site Visit Pros & Cons
      iv. Kapolei Test Fits
      v. Kapolei Site Analysis
   f. Kalaeloa Airport
      i. Kalaeloa Site Description
      ii. Kalaeloa Site Isochrone & Site Map
      iii. Kalaeloa Site Visit Pros & Cons
      iv. Kalaeloa Test Fits
      v. Kalaeloa Site Analysis
6. Summary and Recommendation
   a. Comparative Matrix
EXECUTIVE SUMMARY

At the request of the State of Hawaii DAGS, the Aloha Stadium: Planning for a New Stadium & Site Redevelopment Team (henceforth the Development Design Team) has undertaken a study analyzing the relative merits and drawbacks of the current Halawa site against a range of alternative site options.

The study considers a wide range of measures, including site access, transit connections, regional demographics and development opportunities, social conditions, and economic impacts.

Based on a high-level survey, six potential sites were analyzed in detail:

- The Halawa Site (existing Aloha Stadium site)
- The University of Hawaii at Manoa
- The University of Hawaii at West Oahu
- The Ala Wai Golf Course
- Kapiolani Regional Park
- The Kalaeloa Airport

This Aloha Stadium: Planning for a New Stadium & Site Redevelopment report is a catalogue of the process of selecting the sites chosen for evaluation, a repository of the information used to evaluate the sites, a record of the interaction with DAGS and the Stadium Authority and a summary of the numerical ranking of sites in conclusion.

The study has concluded and it is the recommendation of the Development Design Team that the Halawa Site is the most appropriate, viable and development-ready site for a new 35,000 seat stadium and ancillary surrounding development.

This report and its resulting recommendation sets the stage for the ongoing master planning effort and preliminary economic analysis of the Halawa site for a new stadium. It is important to note that the current phase of work is to understand preliminary master planning for the Halawa site. This alternative site analysis work will be part of a larger process that includes the requirements for the Environmental Impact Study (EIS) which mandates that alternative sites be considered for a new stadium, not simply an analysis of the current or preferred site as a foregone conclusion.

The EIS and associated analyses will be undertaken by the Development Design Team in a subsequent phase as the conclusions of this current work effort.
REFERENCE DATA MAPS OF HONOLULU

Reference data maps were developed from various data sources, including the US Census Bureau, the City and County of Honolulu and the State of Hawaii. They were generated using QGIS software and broken into the following categories for evaluation:

- Population Density
- Land Ownership
- Hazard Zones
- Incentive Zones
- Income & Employment
- Transportation

These categories form a basis for evaluation of each of the proposed sites individually and comparatively. The reference maps are confined to the south side of the island, specifically centers on downtown Honolulu, Waikiki and Oahu. The reference maps served as a base for initial site selection.
Population density is shown as it currently exists in the referenced areas. It does not take into account future growth. The areas of the most dense population are located between the airport and Waikiki, north of downtown Honolulu.

Population density can be used in different ways for evaluation. Areas of dense population can be seen as good locations for development, with many user groups located nearby, while areas of sparse population could be seen as prime spots for future growth.
Land Ownership

Existing land ownership for this project is a significant factor in site selection. Land that is already owned/controlled by the State of Hawaii will be much easier to utilize vs. land that would need to be purchased/acquired.

The design team also wanted to be careful to not consider any land that is to be preserved as a natural preserve.
Oahu’s position as an island in the Pacific leaves it open to several hazards unique to the State of Hawaii, and not the rest of the mainland. These hazards were taken into consideration when selecting a site. The shoreline of Oahu and inland up to 1/4 mile in certain areas falls into a tsunami hazard zone and extreme tsunami hazard zone. Additionally, these areas fall under flood risk in extreme weather. An additional consideration was research on a general sea level rise due to changes in climate. These hazards all play a role in considering whether or not to locate a potential development in these areas, but don’t completely rule out sites near the coast. Hazards can be addressed, land can be elevated and potential hazard zones can become viable.
Development Incentive Zones

There are two geographically-defined incentive programs covering portions of Oahu, which could help to offset development costs on covered sites: Enterprise Zones and Opportunity Zones.

The Enterprise Zones were created by the State of Hawaii to help stimulate certain types of business activity and increase employment in targeted areas of the state. It is intended to bring businesses and opportunity to less affluent areas.

The Opportunity Zones were created by the Federal Tax Cuts and Jobs Act in order to provide incentives for investors to reinvest unrealized capital gains into Opportunity Funds in exchange for temporary tax deferral and other benefits. The Opportunity Funds will then be used to provide investment capital in certain low income communities.
Income & Employment

Income and employment were both considerations in determining locations for the potential project development. Areas of high income are seen as areas with significant potential disposable income to be used at events and in the commercial areas. More importantly, areas of low income and low employment are seen as locations that could significantly benefit from this development with job opportunities that could be created in the immediate area.
Major Transit Routes

The density of Honolulu offers challenges to certain particular areas for development. Transportation infrastructure would need to be built or improved in order to meet the demand of a stadium development. Searching for sites with existing highway access for visitors and close proximity to the harbor and airports for shipping of event materials was an important consideration in locating site possibilities. Additionally, the HART line, currently under construction was a major consideration as it has the capability of bringing large numbers of visitors to stadium events without increasing demand on already busy highways, and can reduce parking requirements for a stadium.
The initial site selection process was then a quick review of these 18 sites, to narrow the team to eighteen (18) potential sites around Oahu and Honolulu.

The initial criteria in finding these locations was to find possible sites in areas that had enough open land to construct the Authority’s desired stadium footprint and also to find land that would be fairly easily acquirable, meaning that it should already be owned or controlled by the State of Hawaii. This initial search led to identifying an initial 18 sites for analysis.

Maps were then analyzed for possible locations. Initial criteria in finding these locations was to find possible sites in areas that had enough open land to construct the Authority’s desired stadium footprint. Reference maps were overlaid with data showing population density, open land, hazard zones, development and incentive zones, median income, transportation maps and maps showing land ownership. These sites were then arranged for possible locations.

Following the field down to a more reasonable number of sites for evaluation.

The first step in the process of selecting a site was to analyze all available data pertaining to the island of Oahu. Reference maps were overlaid with data showing population density, open land, hazard zones, development and incentive zones, median income, transportation maps and maps showing land ownership. These sites were then arranged for possible locations.

Initial criteria in finding these locations was to find possible sites in areas that had enough open land to construct the Authority’s desired stadium footprint. Reference maps were overlaid with data showing population density, open land, hazard zones, development and incentive zones, median income, transportation maps and maps showing land ownership. These sites were then arranged for possible locations.

Next the analysis was a slightly more in-depth review of the particular sites chosen. This was called the “desktop review.” Sites were seen as potential sites for development and simple stadium diagrams were laid out on the sites to check for viability. After this process, 3 additional sites were eliminated from the process: The Sand Island Site, the Ala Moana Site and the Honolulu Stadium Park Site.

The next step in the process of selecting a site was to analyze all available data pertaining to the island of Oahu. Reference maps were overlaid with data showing population density, open land, hazard zones, development and incentive zones, median income, transportation maps and maps showing land ownership. These sites were then arranged for possible locations.

The creation of an evaluation Isochrone to gather specific data pertaining to each of the individual sites.

An in-person visit by the Development Design Team to each of the sites to photograph and catalog the existing conditions, conduct a visual inspection of the site and put forth initial thoughts on development plans and uses.

Development diagrams and test fits, to understand how the stadium and other development projects could be on the site.

The creation of an evaluation matrix that ultimately was subsequently in the books: broken into 4 categories and multiple sub-categories that were discussed and ranked overall amongst the Development Design Team to make a final determination.

During the course of the site evaluation process, the Development Design Team prepared a workbook used for data and with the Stadium Authority Client Group to review the progress and collaboration on the site selection. The workbooks were distributed to the Client Group and filled out individually by each of the members. They were then used to promote communication on the project as a whole.

Conversations 1 sought to identify some of the key elements that make Hawaii such a unique and special place and to help determine what is important to the people of Hawaii. This background information is critical in motivating the ultimate decisions.

Conversations 2 sought to define the site evaluation criteria. The Development Design Team prepared a preliminary site evaluation matrix, which was reviewed and modified to the final version contained in this book, using input from the Client Group.

Conversations 3 provided the 6 sites to the Client Group for their initial thoughts and comments.

Conversations 4 sought to define specifically with the future Aloha Stadium itself and was used to further explore the size and types of events that might best fit there in the future. As we went into detail on what the Client Group might look for in its review.

Conversations 5 was a wrap-up conversation and a time to let the Client Group imagine what the completed project would mean to the State of Hawaii and to the City of Honolulu.

The end of the rest of this process, the Development Design Team reached its conclusion on which site to recommend to the State of Hawaii DAGS and the Stadium Authority.
18 INITIAL SITE LOCATIONS

9 DESKTOP REVIEWS

6 SITES FOR EVALUATION

1. AALA PARK
2. ALA MOANA
3. ALA WAI GOLF COURSE
4. HALAWA
5. HONOLULU STADIUM PARK
6. KALAELOA
7. KALOEI GULCH
8. KAPIOLANI REGIONAL PARK
9. KAPOLEI
10. KAWANUI PARK
11. KOKO HEAD RANGE
12. WAIPAHU
13. U OF H AT MANOA
14. SAND ISLAND
15. WAIPIO PENINSULA
16. WAIPIO
17. U OF H AT WEST OAHU
18. U OF H AT WEST OAHU

18 INITIAL SITE LOCATIONS

1. AALA PARK
2. ALA MOANA
3. ALA WAI GOLF COURSE
4. HALAWA
5. HONOLULU STADIUM PARK
6. KALAELOA
7. KALOEI GULCH
8. KAPIOLANI REGIONAL PARK
9. KAPOLEI
10. KAWANUI PARK
11. KOKO HEAD RANGE
12. WAIPAHU
13. U OF H AT MANOA
14. SAND ISLAND
15. WAIPIO PENINSULA
16. WAIPIO
17. U OF H AT WEST OAHU
18. U OF H AT WEST OAHU

9 DESKTOP REVIEWS

6 SITES FOR EVALUATION

1. AALA PARK
2. ALA MOANA
3. ALA WAI GOLF COURSE
4. HALAWA
5. HONOLULU STADIUM PARK
6. KALAELOA
7. KALOEI GULCH
8. KAPIOLANI REGIONAL PARK
9. KAPOLEI
10. KAWANUI PARK
11. KOKO HEAD RANGE
12. WAIPAHU
13. U OF H AT MANOA
14. SAND ISLAND
15. WAIPIO PENINSULA
16. WAIPIO
17. U OF H AT WEST OAHU
18. U OF H AT WEST OAHU
2. ALA MOANA

Sand Island is an industrial area owned by the State of Hawaii. Portions of the island have been converted into a beachfront camping and recreation area. While much of the remainder is given over to private use, the property is held by the state. The 73 contiguous acres of the island not given include the Honolulu Harbor, the Coast Guard and the city wastewater treatment plant which are bounded by Sand Island Parkway. While Sand Island is geographically proximate to urban Honolulu, it is quite isolated from a transportation perspective. Only the Lt. John R. Slattery Bridge connects Sand Island back to the city and H1 via the Sand Island Access Road. This bottleneck greatly reduces the coverage of the Sand Island 10-minute isochrones, meaning that only 173,100 residents of Oahu live within a 10-minute drive of the site. Combined with complete lack of bus and HART access, this makes Sand Island one of the least accessible sites in the study (second only to Kalaeloa) and with very few options to remediate the issue without negatively impacting harbor operations.

5. HONOLULU STADIUM PARK

Honolulu Stadium Park is located on King Street in the Mo‘ili‘ili district of Honolulu. The site was the original home of the Honolulu Stadium which operated in 1926, held 25,000 seats and was a venue for countless events and concerts before it was finally demolished in 1976 after the completion of Aloha Stadium. The location is near a neighborhood park featuring walking paths, play areas and picnic areas. The site is adjacent to the University of Hawaii at Manoa, and was once home to Rainbow Warriors football team.

The idea of rebuilding a stadium on the site of the original Honolulu Stadium would be interesting, but would necessitate the purchasing and demolition of numerous homes, businesses and other buildings to create the necessary space. The site has no parking available and is not near any of the proposed HART stations.

14. SAND ISLAND

Sand Island is an industrial area owned by the State of Hawaii. Portions of the island have been converted into a beachfront camping and recreation area. While much of the remainder is given over to private use, the property is held by the state. The 73 contiguous acres of the island not given include the Honolulu Harbor, the Coast Guard and the city wastewater treatment plant which are bounded by Sand Island Parkway. While Sand Island is geographically proximate to urban Honolulu, it is quite isolated from a transportation perspective. Only the Lt. John R. Slattery Bridge connects Sand Island back to the city and H1 via the Sand Island Access Road. This bottleneck greatly reduces the coverage of the Sand Island 10-minute isochrones, meaning that only 173,100 residents of Oahu live within a 10-minute drive of the site. Combined with complete lack of bus and HART access, the nearest Sand Island one of the least accessible sites in the study (second only to Kalaeloa) and with very few options to remediate the issue without negatively impacting harbor operations.
The Workbook

For this effort, the Client Group, comprised of representatives from DAGS and the Stadium’s staff, were requested to respond to a pre-prepared workbook designed to prompt opinions about the nature and history of Hawaii, the goals of the project, the criteria used in evaluating the potential sites and the memories of past and future uses of the stadium.

The following section is a consolidation of the Client Group’s responses to that workbook. Everyone’s opinions have been catalogued on each page and used by the Design Development team both in preparation of the analysis matrices and the understanding of the importance of the project and the evaluation of each of the sites.

The responses and comments are written in green throughout the book. It is important to note that the collected comments are those of the Client Group only and not the Design Development Team. These comments and opinions were then used by the Design Development Team along with their own opinions in the site selection process.
1. What, in your opinion, is the ultimate goal for this project?

- Provide a stadium facility of best value to the taxpayer
- A self-sustaining, versatile entertainment center that could also act as a hub for a regional guests with consideration given to transportation, revenue generating opportunities, other entertainment venues, and tourism
- Sustainability of the facility should be consistent with the community of the state of Hawaii. The facility should be sustainable and flexible
- To decide a “location”, in deciding to build new or remodel existing structure
- Provide safe, state-of-the-art entertainment facility for use by the people of Hawaii
- New major league teams (likely) to be included on property with maximized development in between. Create a state entertainment facility that is also for the community.
- New concerts
- A stadium with diverse surrounding uses that will be a gathering place for international uses including sports, entertainment, shopping and office uses that can generate revenue to sustain the site and provide jobs.

Questions About the Project

2. What, if anything, can this project provide that the State of Hawaii doesn’t already have?

- Reduced maintenance costs + versatile facility
- A large enough venue to accommodate large scale events that would not compete with existing venues
- A facility that can host multiple events with being debate and have the capability to be surge and peak season, 365 days a year. This includes a broad definition of activities.
- A sustainable, safe, money maker project
- Safe, modern & economic facility
- Major destination for all who visit the state of Hawaii
- Site of the art venue that can host concerts events
- A multi-use stadium property which will be a source of pride for the community and garner more entertainment jobs.

3. At the end of this project, how will you measure success?

- Self-sustaining venue that is a paradigm shift for Hawaii
- A facility that will become a prime location for the sustainable development of the urban grid
- A project of project revenue spread to get the project going, low loan to get the project going
- Project fully for Hawaii, economically viable
- Completion of a new facility/ballpark
- Site of the art venue throughout the year that will generate revenue for the state
- Accomplish all goals, new multi-use stadium that will become a downtown anchor venue in a central location.

Questions About the Project
**Questions About the Project**

5. Mauka or Makai?

- In between: Hawaii’s “Ahupua’a” flow Mauka to Makai.
- Both
- Makai
- Closer to Makai

4. What is something uniquely Hawaiian that you would like to see reflected in this project?

- The open, Aloha Airport and sense of welcome, with respect for all local cultures and partnerships of the environment.
- Hawaii in Name: Hawaiian sports and their names like NFL, NBA, etc.
- Architecture should reflect Hawaiian culture / environment.
- View and connection of water and Pearl Harbor in a place central to the island. Also tribute to Native Hawaiian culture.
### Site Features

What site features are most important for building development?

- Land & Environment
  - 9. environmentally sound
  - 9. flat terrain
  - 6. plentiful area
  - 2. good slope
  - 2. water frontage

- Other:
  - accessible transportation to/from
  - walkability
  - access to trade winds (natural ventilation since no A/C)
  - low barriers to development

### Proximity

What elements are most important for the site to have nearby?

- 9. Downtown
  - 3. Waikiki
  - 2. Blaisdell Center
  - 1. HART

### Community & Demographics

Which communities or groups should benefit most from this development?

- 3. student communities
  - 2. tourist communities
  - 1. business communities

### Transit & Infrastructure

Rate the importance of the following site access methods:

- (Rate them 1–5, with 1 being the most important)
  - road / highway access: 1.4
  - bus access: 2.7
  - pedestrian & bicycle access: 3.3
  - boat access: 4.6
Development Costs
What element of developing the site could have the biggest negative impact on choosing a site?

Economic:
- construction delays (time, issues, costs)
- community opposition, timing of project

Community:
- lack of development incentives
- other

Political:
- new user groups

Economic feasibility

Community Acceptance

Political Visibility

Community Acceptance

Other:
- domestic & international tourists
- new user groups

What element of developing the site could have the biggest negative impact on choosing a site?

Development Costs
What element of developing the site could have the biggest negative impact on choosing a site?

Economic:
- construction delays (time, issues, costs)
- community opposition, timing of project

Community:
- lack of development incentives
- other

Political:
- new user groups

Economic feasibility

Community Acceptance

Political Visibility

Community Acceptance

Other:
- domestic & international tourists
- new user groups

How important is it that the stadium receives support in the form of the following?
(Rate them 1–5, with 1 being the most important).

- Community Reception
- Other:
  - domestic & international tourists
  - new user groups

User groups

What element of developing the site could have the biggest negative impact on choosing a site?

Development Costs
What element of developing the site could have the biggest negative impact on choosing a site?

Economic:
- construction delays (time, issues, costs)
- community opposition, timing of project

Community:
- lack of development incentives
- other

Political:
- new user groups

Economic feasibility

Community Acceptance

Political Visibility

Community Acceptance

Other:
- domestic & international tourists
- new user groups

What element of developing the site could have the biggest negative impact on choosing a site?

Development Costs
What element of developing the site could have the biggest negative impact on choosing a site?

Economic:
- construction delays (time, issues, costs)
- community opposition, timing of project

Community:
- lack of development incentives
- other

Political:
- new user groups

Economic feasibility

Community Acceptance

Political Visibility

Community Acceptance

Other:
- domestic & international tourists
- new user groups

What element of developing the site could have the biggest negative impact on choosing a site?

Development Costs
What element of developing the site could have the biggest negative impact on choosing a site?

Economic:
- construction delays (time, issues, costs)
- community opposition, timing of project

Community:
- lack of development incentives
- other

Political:
- new user groups

Economic feasibility

Community Acceptance

Political Visibility

Community Acceptance

Other:
- domestic & international tourists
- new user groups

What element of developing the site could have the biggest negative impact on choosing a site?
**University Of Hawaii, Manoa**

**Pro**
- centrally located
- central campus location, self-contained campus
- lots of parking: transportation access points
- proximity to Muller Hall
- people are in the present site
- easement for approach
- walkability
- pedestrian
- safe, easy access to-campus
- on-campus facilities
- proximity to Waikiki
- close to Waikiki, students @ Manoa
- mostly benefits the U of H
- close to school campus
- close to other venues
- close to students
- close to near university
- student access, close to Waikiki, amenities (restaurants close by)

**Con**
- community opportunity
- space limitations, not conducive to all areas of island
- land-locked, bad freeway access
- no near time plans for trail
- bad traffic mess
- can they (U of H) afford + maintain the project
- lack of water/sewer
- lack of road access, disturbance of existing residents
- lack of property to expand sports complex, partially developed already
- traffic in/out, small site, limitation of surface streets
- long time to development
- zoning, roadways in/out, lack of development in surrounding area
- size restricted, infrastructure (transportation)

**University Of Hawaii, West Oahu**

**Pro**
- student participation
- close to Waikiki
- close to rail
- potential large land area, near rail
- land available
- large land area, accessible
- large site: development, on campus, lack infrastructure
- existing infrastructure, lack of potential
- existing infrastructure, lack of potential
- large land area
- future growth of population

**Con**
- away from current population center
- lack of central location
- windward residents will not travel here
- too far for many parts of the island where people live
- lack of water/sewer
- one way in one way out
- distance from population (far)
- distance from Waikiki
- lack of water/sewer
- one way in one way out
- distance from population (far)
- distance from Waikiki
- distance from population (far)
- distance from Waikiki

**Ala Wai Golf Course**

**Pro**
- nearby communities, close to LHI
- close to rail
- potential large land area, on campus, near rail
- land available
- large land area, accessible
- economic reasons, close to rail
- rail ready: commonly supported
- close to Waikiki
- pretty, the only course for development
- large area, near Waikiki: development, existing amenities, restaurants and entertainment

**Con**
- golfers lose
- flood zone potential
- access, disruption to community
- future
- road access, water/sewer lack
- existing use Golf Course
- infrastructure, away from population center / isolated to one side of island
- distance from Waikiki
- one way in one way out
- distance from population (far)
- distance from Waikiki
- one way in one way out
- distance from population (far)
- distance from Waikiki

Kapiolani Regional Park

Pro
- nearby communities
- close to Waikiki
- large area
- proximity, close to Manoa campus
- close to Waikiki

Con
- access, does not have ingress/egress to accommodate stadium
- community opposition, does not have ingress/egress to accommodate stadium
- traffic and potential for future access, much better for recreation users from that area
- takes away from current events, green space does not exist
- nearby access to koko Crater, the Trust does not allow profit

Sand Island

Pro
- land improvement of the area
- nearby communities
- close to Waikiki
- large area
- not centrally located
- industrial land
- large land area
- available land

Con
- access
- establishment of a stadium
- infrastructure challenges, will be in an infeasible place
- sea level rise?
- infrastructure
- for most of the stadium, the Trust does not allow profit

Haleiwa Airport

Pro
- abundant land
- area is sufficient to host events
- large area
- growing community
- no true HART
- local availability
- local area

Con
- far from current population center
- not centrally located
- may be limited by an development requirements, access to rail, windward/east side
- limits
- not centrally located, flight path modifications, no HART
- access
- traffic in/out, far from H1
- limited access
- sea level rise?
- rises in operations of stadium (noise)
- infrastructure
- FAA height restrictions?
Existing Events
What do you like best about the current stadium?

- It is a fair and reasonable location to serve all of Oahu: near to Waikiki, West Oahu, East Oahu, Kailua (Shoreline Coll.)
- location, openness, history (memories of past events),; caretaker's flexibility
- convenient & traffic problems
- road access to most parts of the Island, good sight lines
- centrally located site and a major gathering place, creating enjoyable and memorable moments
- nice open feel, accessible to both east + west side, ability to tailgate, 12,000+ capacity
- location and available resources
- "the wave"

University of Hawaii Rainbow Warriors Football Stadium Events
What events would you most like to see in a new stadium? (Mark as many as you want.)

- Major Stadium Concert
- X-Games
- University of Hawaii Women's Soccer
- College Football Bowl Game
- NFL Pro Bowl
- Monster Jam
- Rugby Match
- WWE Smackdown
- CrossFit Games
- Professional or International Soccer Match
- Baseball
- UFC
- Sumo Wrestling
- HS Sports
- Spartan Race

Presented Master Plan Concepts
Rank the three (3) concepts presented so far for the Halawa Site. (Rate 1–3, with 1 being the best.)

Stadium Aesthetic
What aesthetic look can you picture in your mind for a new stadium? (Mark as many as you want.)

- 6
- 1
- 6
- 3
- 4
- 1
- 3
- 3
- 23
Future Thoughts

The front page of the Honolulu Star-Advertiser is featuring this project on opening day.

What does the headline say?

"We did it" for Hawaii

The wait is over finally!

Conclusion

CRAWFORD ARCHITECTS, LLC

1801 McGee Street, Suite 200
Kansas City, Missouri 64108

(816) 421 2640
CrawfordArch.com
The selected sites are to be evaluated for suitability based on a range of metrics:

- **HART Access**
- **Total Acreage**
- **Economic Impact**

considered. 1 point deducted per 10 miles of road distance.

For the project to be viable as a mixed-use development there must be enough room for on-site parking and road lanes to accommodate personal vehicles for daily use, event traffic.

A second point for those users. The time and distance to the airport, as well as the ability to accommodate a stadium program.

Proximity to Waikiki

A third point for each service under 5 miles distant from site.

ability to accommodate tailwinds would it face?

ability to accommodate stadium program.

Developing a high-capacity rapid transit link from urban Honolulu with Daniel K. Inouye International Airport, various construction, that at completion will provide a high-capacity rapid transit system currently under construction, that or complex 1 point deducted if it is feasible to do so.

The HART is an elevated-guideway rapid transit system currently under development partner (though this program is not fully fleshed-out at this time). Additionally, the State of Hawaii has designated several “Opportunity Zones” under the 2017 Tax Cuts and Jobs Act of 2017 to promote job creation and economic development in geographically-targeted parts of the island. Additionally, the State of Hawaii and the County of Honolulu have a partnership program called “Hawaii Enterprise Zones” that offers tax incentives to promote job creation and economic development in geographically-targeted parts of the island. The cost of acquiring land for development can be a major component of total development costs. In this case, all sites are held by the State of Hawaii, although one is held by the Department of Hawaiian Homelands.

**Flood/Tsunami Hazard Avoidance**

While a developer could easily include additional roads or sites, during any event sharing significant local road effectiveness more spaces will be needed, teams can flexibly accommodate on-site parking. Access to parking is a factor in the site readiness in considering site options. 1 point deducted per 10 miles of road distance.

The University of Hawaii and local residents, access to the site for visiting teams, and fans must be considered. As the primary mode of interstate travel to Honolulu, Inouye International Airport represents a critical connection.

**Sea Level Rise Hazard Avoidance**

In addition to present-day flooding and tsunami hazards, state to the future. The E. T. Kameloa II study predicted that by 2100, the sea may rise by 3.2 feet. Intrastate Hawaiian Islands has been identified as a “Tsunami Warning Zone” for typical hazards and an “Extreme Tsunami Warning Zone” for tsunami hazards. FEMA flood hazard zones are used to make risk assessments for weather- and tide-related risks; and tsunami risks the primary natural hazards to consider. FEMA flood hazard zones are used to make risk assessments for weather- and tide-related risks; and tsunami risks the primary natural hazards to consider.

Though the new stadium development will largely serve the needs of the University of Hawaii and local residents, access to the site for visiting teams, and fans must be considered. As the primary mode of interstate travel to Honolulu, Inouye International Airport represents a critical connection.

**Tailwinds**

What zone or zones are currently applied to the site by the County of Honolulu.

Events drawing large attendance frequently require the assistance of public services for crowd control, on-site medical care, and emergency needs.

**Proximity to Waikiki**

The mainland communities, those without direct access to Waikiki. Although it is not the only place hotels are found on Oahu, about 27,700 of the roughly 31,700 hotel rooms on the island (87%) are located in Waikiki.

Although hotels are found on Oahu, about 27,700 of the roughly 31,700 hotel rooms on the island (87%) are located in Waikiki. Although it is not the only place hotels are found on Oahu, about 27,700 of the roughly 31,700 hotel rooms on the island (87%) are located in Waikiki.

**Proximity to Emergency Services**

**Development Incentives**

Any confounding factors not encompassed in the metrics above that may add to the challenge of creating a viable development at a given site.

**Infrastructure Costs**

What zone or zones are currently applied to the site by the County of Honolulu.

**Accessibility**

The cost of acquiring land for development can be a major component of total development costs. In this case, all sites are held by the State of Hawaii, although one is held by the Department of Hawaiian Homelands.

Infrastructure Costs

The cost of acquiring land for development can be a major component of total development costs. In this case, all sites are held by the State of Hawaii, although one is held by the Department of Hawaiian Homelands.

**FEMA flood hazard zones**

Due to their presence on any site represents a significant potential risk for any public or private development.

As the island’s container shipping terminal, convenient access to and from Honolulu Harbor will be important for traveling shows and other, similar events. 1 point deducted if it is feasible to do so.

**Ability to Accommodate a Stadium Program**

The selected sites are to be evaluated for suitability based on a range of metrics:

- **HART Access**
- **Total Acreage**
- **Economic Impact**

The cost of acquiring land for development can be a major component of total development costs. In this case, all sites are held by the State of Hawaii, although one is held by the Department of Hawaiian Homelands.

**Proximity to Emergency Services**

**Infrastructure Costs**

What zone or zones are currently applied to the site by the County of Honolulu.

**Accessibility**

The cost of acquiring land for development can be a major component of total development costs. In this case, all sites are held by the State of Hawaii, although one is held by the Department of Hawaiian Homelands.

**Development Incentives**

Any confounding factors not encompassed in the metrics above that may add to the challenge of creating a viable development at a given site.

**Accessibility**

The cost of acquiring land for development can be a major component of total development costs. In this case, all sites are held by the State of Hawaii, although one is held by the Department of Hawaiian Homelands.

**Development Incentives**

Any confounding factors not encompassed in the metrics above that may add to the challenge of creating a viable development at a given site.

**Accessibility**

The cost of acquiring land for development can be a major component of total development costs. In this case, all sites are held by the State of Hawaii, although one is held by the Department of Hawaiian Homelands.

**Development Incentives**

Any confounding factors not encompassed in the metrics above that may add to the challenge of creating a viable development at a given site.

**Accessibility**

The cost of acquiring land for development can be a major component of total development costs. In this case, all sites are held by the State of Hawaii, although one is held by the Department of Hawaiian Homelands.

**Development Incentives**

Any confounding factors not encompassed in the metrics above that may add to the challenge of creating a viable development at a given site.
<table>
<thead>
<tr>
<th>Category, Site Infrastructure, and Environment</th>
<th>Subtotal</th>
<th>Criteria</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Analysis and Scoring Rubric</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Acreage</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART Access</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity to Daniel K. Inouye International Airport</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity to Emergency Services</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity to Honolulu Harbor</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity to Waikiki</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to Accommodate Stadium Program</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flood Risk/Flood Hazards</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Level Risk Hazard</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World’s Populace Impact</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suitability for Emergency Shelter</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Visability</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development Costs</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P3 Potential or other Development Possibilities</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoned Lands Encumbrance</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure Costs</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Acquisition Costs</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complexity</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Impact</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Acceptance</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Cultural Impact</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Viability</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per-Capita Income in Vicinity</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households Experiencing Poverty in Vicinity</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population in Proximity</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income in Vicinity</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Impact</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Improvement Opportunities</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Site Difficulties</td>
<td>-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Site Difficulties</td>
<td>-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intuitive Site Qualities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unique Site Improvement Opportunities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Site Difficulties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Site Difficulties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Decision Matrix</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Situation, Site Analysis and Scoring Rubric**

**Category Subtotal Criteria Value**

**Site Analysis and Scoring Rubric**

**Category Subtotal Criteria Value**

**Site Decision Matrix**

**Category Subtotal Criteria Value**

**Economic Impact**

**Community Acceptance**

A measure of how supportive the neighborhood and establishments in the vicinity of the site are likely to be for the development of the economy.

**Positive Cultural Impact**

A measure of how much the development may provide new cultural and entertainment benefits to the community.

**Political Viability**

A measure of how the differing sites may be affected by current or future political decisions, and the direction of growth in the community.

**Community**

**Per-Capita Income in Vicinity**

The ability of the project to lift household incomes in an area varied based on the average income in proximity. Lower average incomes in an area are indicative of a greater need for better employment opportunities. Based on 2016 American Community Survey (ACS) data.

**Households Experiencing Poverty in Vicinity**

While not a direct measure of employment shortfalls, households in poverty may benefit from the availability of additional jobs that could permit householders to combine two incomes, or enable one or more members of the household into the workforce. Based on 2016 American Community Survey (ACS) data and Board of Land and Natural Resources (BLNR) data.

**Population in Proximity**

A critical indicator of the potential user-base of any development, the range of the 10-minute drive time also serves as a good proxy indicator for new employment opportunities. Based on 2016 American Community Survey (ACS) data.

**Income in Vicinity**

The ability of the project to lift household incomes in an area varied based on the average income in proximity. Lower average incomes in an area are indicative of a greater need for better employment opportunities. Based on 2016 American Community Survey (ACS) data.

**Economic Impact**

**Positive Site Improvement Opportunities**

Positive site improvement opportunities may provide opportunity to adjust the intrinsic scores based on discussion and collection knowledge of the Client and Development Design Team.

**Unique Site Difficulties**

Some of the sites may have impediments to development that are neither easily identifiable, nor able to be placed easily in the evaluation rubric. This category provides opportunity to adjust the intrinsic scores based on discussion and collection knowledge of the Client and Development Design Team.
Halawa (Existing Aloha Stadium Site)

The existing Aloha Stadium is situated on 97 acres of land immediately adjacent to the highways H1, H201, and Salt Lake Boulevard, on the Diamond Head side of Pearl Harbor. Currently, the site consists of the stadium proper and its surrounding surface parking. Halawa Stream cuts through the south end of the site, and a portion of its channel is considered wetland. The future Halawa/Aloha Stadium stop on the HART will be at the ewa side of the site, and is expected to be complete in 2020. In addition to the rail stop, 20 bus stops are present in a ¼ mile radius from the site perimeter. Emergency services are reasonably close to the site, with only police services (dispatched from Pearl City Police Station) more than five miles distant. As a developed site, utilities are already present, though additional capacity will likely be required to support more intensive development.

Roughly 258,000 residents of Oahu live within a nominal 10-minute drive, and those residents earn on average about $28,500 per year. This puts the site in the middle of the pack demographically, but with good connectivity to areas beyond the 10-minute driving isochrone thanks to its transit links.

The existing Aloha Stadium was constructed in 1975, and has reached the end of its useful life. The steel superstructure of the facility has undergone rapid corrosion as a result of corrosion protection and its proximity to seawater. The demolition and construction of a replacement facility on the site, while not depriving the Rainbow Warriors of a venue, would be one of the larger challenges of redeveloping the site — though not an insurmountable one by any means.

This site has also been thoroughly studied for redevelopment, and a wealth of analysis is available to build a development plan with minimal additional study.
The "10-Minute Driving Map" represents an isochronal diagram highlighting a distance around each one of the potential sites. This isochrones map show the distance that one could travel to or from the site in a 10-minute period of time, with no traffic. This catchment area is used to collect all of the data points and rubric information included in the site analysis matrices. This is shown consistent for all the sites.

The "Vicinity Map" shows the bounds of an area that is a 15-minute (1/4-mile) walk from the site perimeter. This area provides additional information about the facilities and infrastructure immediately adjacent to the site. This is shown consistent for all the sites.
Halawa Site

General Description:
Located at the intersection of H1, H3 and H201, the Halawa Site is the existing location of Aloha Stadium. The 50,000 seat venue opened in 1975 and has been the home of the University of Hawaii football team, the Swap Meet and host of many major concerts and events over the last 45 years.

Pros

- Planned HART station is already under construction on the east side of the site.
- Existing stadium infrastructure is in place.
- Ample site area for new stadium along with additional ancillary development.
- Close to the freeway and the airport for visitor access and event shipping / management.
- Close to Pearl Harbor.
- Access to the site from the rest of the island is very good; car traffic.
- Tradition of site as the stadium venue for the last 45 years is already in place and public support could potentially be easier than at other sites which might require changes to existing uses.
- Equidistant between Waikiki / Downtown and West Oahu.
- Since the site is mainly covered in car parking only preparation of the site for development would not be difficult.

Cons

- Existing stadium needs to be addressed; either removed or renovated in place.
- Concerns over the accommodation of the Swap Meet.
- Not close to any of the University Campuses.
- Not great pedestrian access.

Summary Observation(s):
The site appears to be the most ready for immediate development. Master Plan studies for this site have already been conducted and is more than sufficient for significant development. This site has the benefit of continuing the legacy of use as a stadium / event site along with the ability to grow and provide additional development for the surrounding areas.