

TMT Workforce, Education, Public Outreach and Communications (WEPOC)

Gordon K. Squires

**TMT / Caltech-IPAC Communications &
Education**

Goal

Integrate WEPOC as a fundamental component of the
Thirty Meter Telescope International Observatory

TMT can serve as a model for large, international
science projects

Should TMT engage in
any WEPOC activities at
all?

Why?

Where?

Hawaii? California? Across the
partnership? Beyond?

When?

TMT has first light in the ~2027; does
TMT WEPOC begin then?

For whom?

TMT as a Role Model

- If ever there was a project that demonstrated the need for WEPOC, it is TMT
- Each of W, E, P-O & C has been important to the very core of the project
 - In Hawaii
 - For partners: governments, funding agencies, key supporters, science community, general public

WEPOC Values

- Create a WEPOC plan that incorporates all phases of the TMT project
- Create a WEPOC plan that is relevant to all of the partners
- Create a WEPOC plan that leverages what is unique about TMT

TMT WEPOC Landscape

- Varying levels of WEPOC infrastructure, experience and support among the partners
 - ⬡ Even in the U.S., which historically was active and supportive in WEPOC, WEPOC has been ... less actively supported recently
 - ⬡ Need to develop plans within each partner, with priorities relevant within each partner, as well as a plan that includes all the partners
 - ⬡ Need to develop an infrastructure within the partnership

WEPOC Team

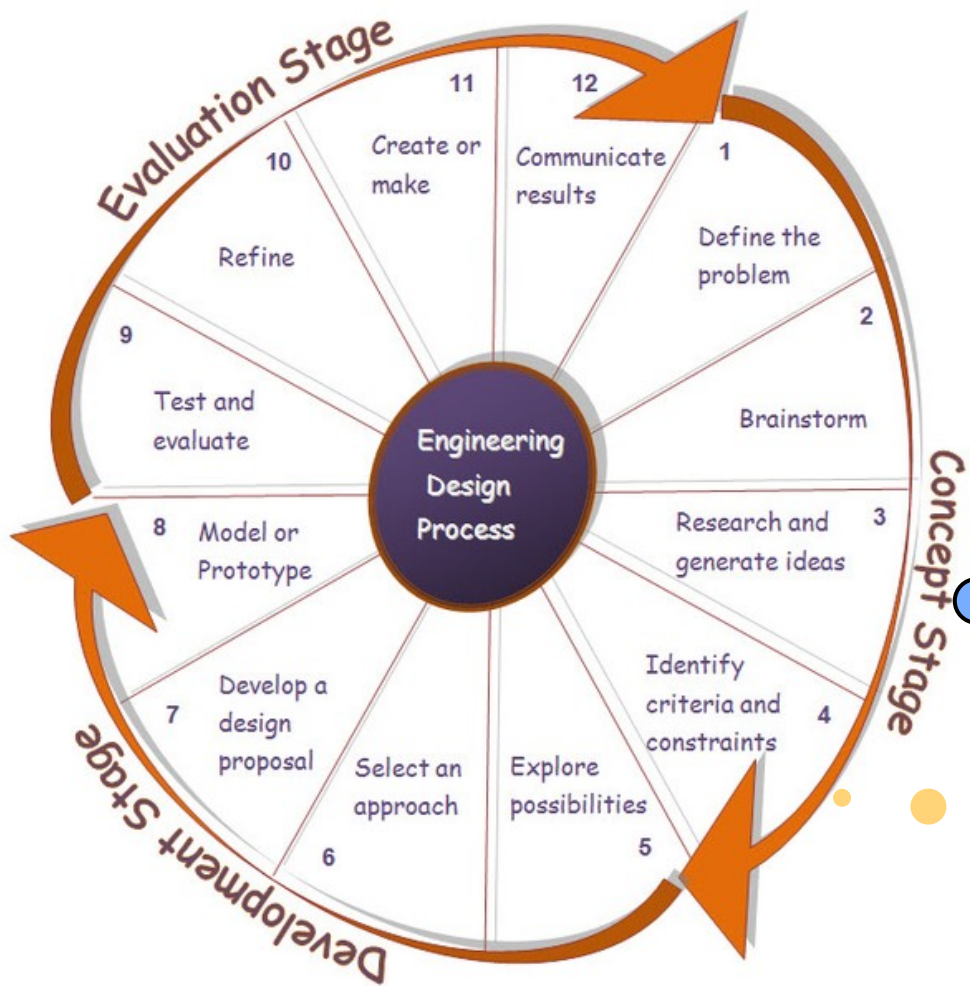
◆ TIO:

- ◇ Gordon K. Squires, Sandra Dawson, Janesse Brewer, Nanci Dumas + team@IPAC/Caltech (TIO)
- ◇ Wako Aoki (Japan)
- ◇ Mitch Aiken (Caltech)
- ◇ Eric Chisholm (Canada)
- ◇ Claire Max, Lisa Hunter, Austin Barnes (UC)
- ◇ Samir Dhurde (India)
- ◇ Yiping Wang (China)

◆ US WEPOC Advisory Group

- ◇ Steve Pompea (NOAO, Chair)
- ◇ Paul Coleman (UH)
- ◇ Judith Donnelly (Three Rivers Community College)
- ◇ Michelle Hall (Science Education Solutions)
- ◇ Sue Ann Heatherly (NRAO)
- ◇ Derek Pitts (Franklin Institute)

WEPOC: Planning Process



2013 – 2014

Form international TIO WEPOC advisory group

Survey of peer facility plans, programs, systems, challenges

Survey of TIO partner WEPOC plans, systems, programs, needs, desires, challenges

2014

Define core values, goals of TIO WEPOC Program

WEPOC Planning: Next Steps

2014 – 2015

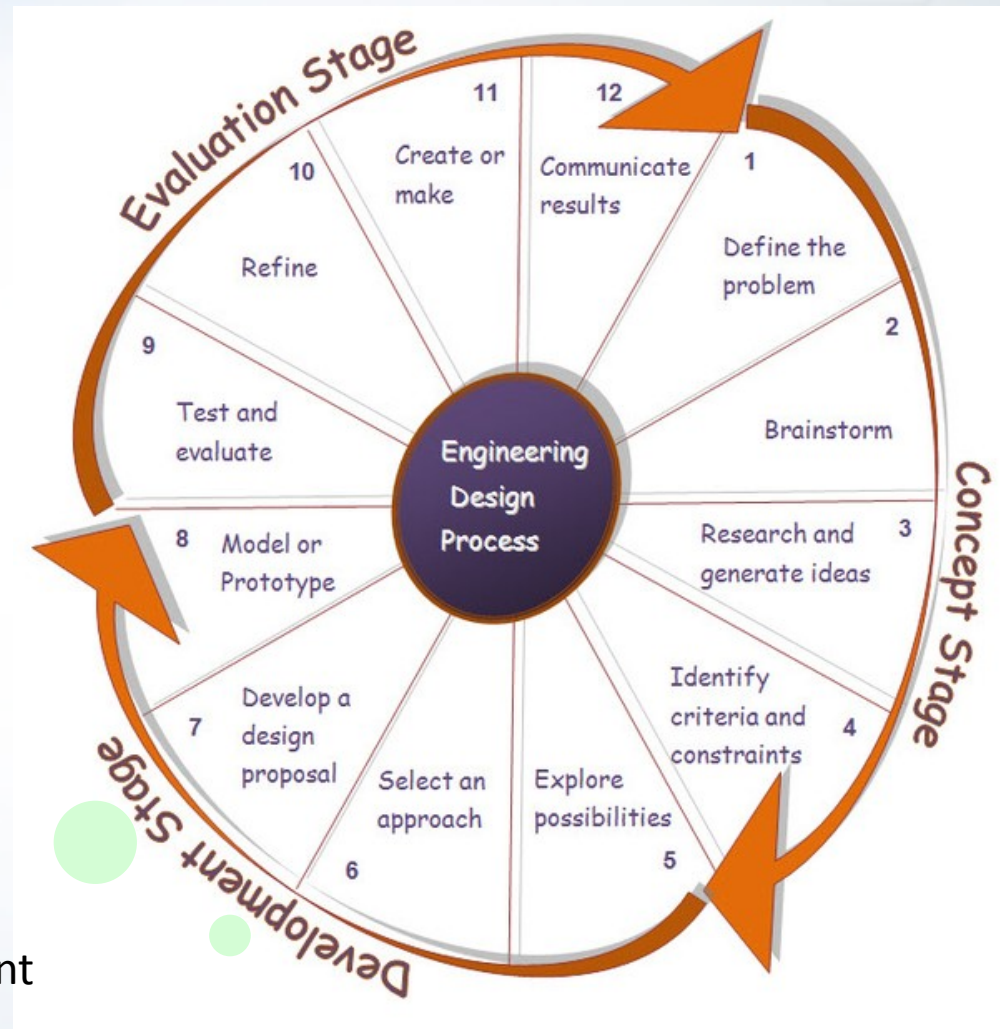
Develop Conceptual designs:

W = international internship program

E = engineering challenge

POC = TMT exhibit/display

These programs are pilots and in alignment with TMT WEPOC values.



Taking a Step Back: We Need Your Inputs

https://www.surveymonkey.com/r/TMT_WEPOC_2016

Building the Partnership: US/NSF

A plan for US national participation in the TMT International Observatory

An Integrated Workforce, Education, Public Outreach, and Communication Plan for the Thirty Meter Telescope Project

Stephen M. Pompea
National Optical Astronomy Observatory
Chair, Workforce, Education, Public Outreach, and Communications Committee
spompea@noao.edu

Gordon Squires and Sandra Dawson
TMT International Observatory

Draft report, 18 May 2016

Hawaii

Hawaii Considerations

- Obtaining legal right to resume construction
- Resuming construction and successfully having continuous and long-term access to Maunakea site

Press Release

Statement from TMT Regarding Recent Board Meeting

02.11.2016

The TMT International Observatory Board of Governors met last week to discuss the future of TMT on Maunakea. To follow is a statement from Henry Yang, Chair of the TMT International Observatory Board:

"At this time, Hawaii remains our first choice for the location of TMT, and we are very grateful for all of our supporters. Given the enormous investment and potential challenges ahead, it is necessary to also carry out a review of alternate sites."





Thirty Meter Telescope

Published by Gordon Squires [?]
Page Liked · March 21 · Edited ·

TMT Board members and TMT Project Manager Gary Sanders visited the observatory site at La Palma in the Canary Islands last weekend. Beautiful site! — at [Observatories La Palma](#).

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6

Chronological



Roger Plattner It's over.....TMT will be built some place that values education. ...progress.non self serving narcissistic inhabitants

[Like](#) · [Reply](#) · [Message](#) · March 23 at 12:54pm



Write a comment...



Hunting for alternate site? TMT mum after board members visit Canary Islands

Published March 22, 2016 - 1:30am



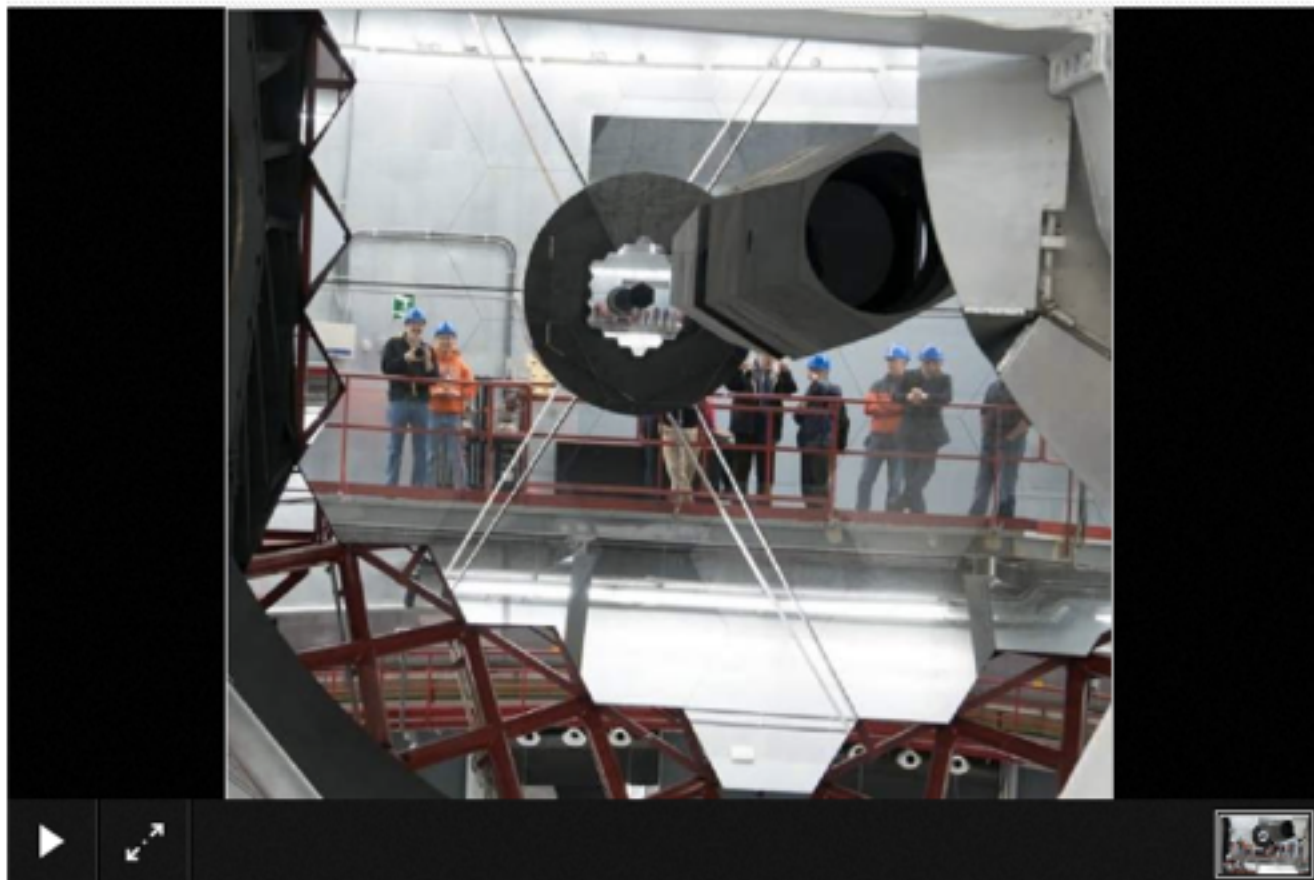
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By TOM CALLIS Hawaii Tribune-Herald

The Thirty Meter Telescope's leaders don't appear to be wasting much time finding an alternative site for the next-generation observatory, if a recent post on social media is any indication.

100% 8:17 AM

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What do you think about the restart of the Thirty Meter Telescope permitting process?

May 12, 2016

A. Positive; hope TMT succeeds (1,182 Votes)

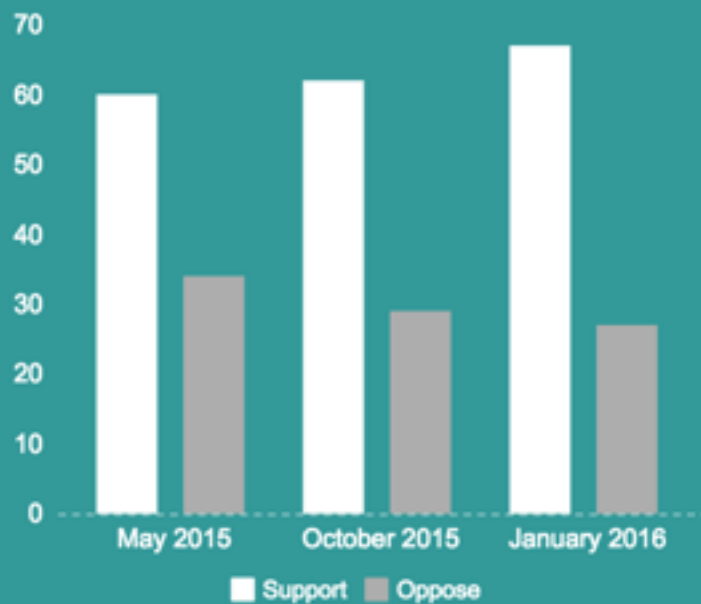
C. Negative; hope TMT leaves (107 Votes)

B. Neutral; mixed (52 Votes)

PREV NEXT

Support/Opposition to moving ahead with construction of TMT on Maunakea:

General



Native Hawaiians





Colin Aspin

27 mins

Got this tonight from Subaru staff...

After we (Subaru daycrew 2) departed Subaru summit facility at 17:30 we came across a man coming out of the drainage ditch off to the side of the road about a 1/4 mile down from the upper parking lot. He had no shirt with white shorts. About 100ft after seeing him we came across rocks lined up across the downward lane. We then stopped and removed the rocks. Rangers were notified at the VIS shortly after. Be Cautious when driving on the summit tonight.

See photo.





Judge Seeks 'Fresh' Start, But Acrimony Over TMT Resurfaces

Native Hawaiians flood a pre-hearing conference Monday as lawyers argue about what's ahead for a June 17 contested-case hearing.

YES! TMT



Thirty Meter Telescope

Page Liked · April 2 · 18

Kimo Pihana leads the Maunakea Observatories entry supporting astronomy in the Merrie Monarch Festival Parade in Hilo, Hawaii

Love Comment Share

169

Chronological

18 shares

5 comments



Bethany Welsh Andersen Gotta love uncle kimo!

Like Reply 6 April 2 at 4:18pm



Anglenani Bayya He was awesome!

Like Reply 1 April 2 at 6:39pm



Charles Long Great job!

Like Reply April 2 at 11:03pm



Paul Leo Klink Herk Brouwer Rogers

Like Reply 2 April 3 at 1:00pm



Karen Root Mahalo Nui!

Like Reply 1 April 4 at 8:48am



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SATURDAY, MAY 21, 2016

WESTHAWAII.TODAY.COM

West Hawaii Today

Pro-TMT Hawaiians ask to join case

Group says Mauna Kea no more sacred than the rest of the island

BY NANCY COOK LAUER
WEST HAWAII TODAY
ncook@westhawaii.com

HILO — Not all Native Hawaiians oppose construction of the Thirty Meter Telescope atop Mauna Kea, a group of community leaders said Friday. The group has formed the nonprofit Perpetuating Unique Educational Opportunities

Inc. — known by its acronym PUEO, for the endemic owl of Hawaiian myth and legend — and has filed a motion to intervene in the contested case currently underway.

The state Supreme Court ruled last year the state Board of Land and Natural Resources shouldn't have issued a permit to build the \$1.4 billion giant

telescope on conservation land without first holding a hearing to evaluate a petition challenging the project's approval. A June 17 hearing in Hilo is scheduled to determine who may participate.

Also asking to participate are some Native Hawaiians who oppose the project and the nonprofit corporation that wants to build it.

PUEO was formed "because so much press has been focused on a voice that Native Hawaiians were against

science and technology on Mauna Kea," and to "recognize the importance of Hawaii's children to seek knowledge from all sources," according to a statement.

The group is led by Keshi Warfield, recently the son of the late, or King, of the 2016 Merrie Monarch Festival and an educator of Hawaiian youth who has an after-school canoe program in Kaula.

"If we don't come out and talk about it, who will?" Warfield said during an interview with

the newspaper at the group's attorney's office Friday. "We know we're walking into a bull's-eye. We're doing it for the benefit of this island and the community as a whole."

Others include Patrick Kahawaiolas, president of the Kaula Community Association, Wallace Ishii, East Hawaii commissioner, the Hawaiian Home Commission, William and Richard Ha Jr.

SEE NATIVE PAGE

CONGRATULATIONS — SENIORS

Ke Kula o Ehunuikaimalino Hawaiian Immersion School graduates seniors



'Justice' for the k

Man found guilty of stealing spear from Kamehameha statue

BY JOHN BURNETT
HAWAII TRIBUNE-HERALD

HILO — A 32-year-old homeless man was found guilty Friday of damaging the statue of King Kamehameha the

for the community," said Deputy Prosecutor Haaheo Kahoolahalaha. Carroll earlier rejected a plea deal in which he would receive probation and time already served in jail, and wouldn't be assessed a fine or ordered

doing," said. did n (the son cor

TMT Education and Job Benefits

● TMT Community Benefits package key elements:

- THINK Fund - \$1M/year for Hawai'i Island STEM education - \$2M given since August 2014.
 - Hawai'i Community Foundation and
 - Pauahi Foundation administer
- TMT Workforce Pipeline Program
 - Comprehensive, proactive, results-oriented program
 - In conjunction with UHH, HawCC, State DOE

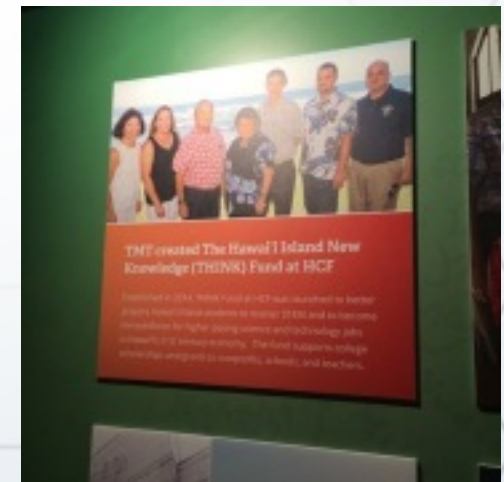


● Construction

- 7-8 year construction project
- 300 union construction jobs

● Operations

- 140 staff members when operational
- Hilo headquarters
- Generates \$26 million annually in observatory operations



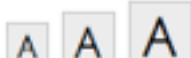
Akamai Workforce Initiative Introduces Student Selection

By Big Island Now Staff

🕒 Posted May 23, 2016, 01:40 PM HST

💬 0 Comments

Text Size:



Hawai'i college students taking part in the Akamai Workforce Initiative's 2016 Summer Internship Program have been selected.

In total, 30 students will have the opportunity to intern in areas that will develop their science and technology careers, according to program officials.

The Thirty Meter Telescope is the lead funder of the project. The Akamai Internship Program provides community college students and undergraduates with summer projects at observatories and other high tech companies in Hawai'i.

Each of the students are either from Hawai'i or are enrolled at one of the University of Hawai'i System campuses. In addition, nearly half of the students are of native Hawaiian ancestry.

TMT Site Selected in 2000

- 500 feet below the summit
- No archaeological or cultural sites
- No burials
- No plants
- No bugs
- No harm to the environment

TMT Process

- ◆ 2003 Application to do testing at site on Maunakea
- ◆ 2008 Draft Environmental Impact Statement
- ◆ 2009 Public Meetings on Draft EIS, OHA Supports TMT, Maunakea selected after worldwide review
- ◆ 2010 EIS accepted, approved by Governor, no legal challenges. Land Board application for CDUP filed
- ◆ 2013 Conservation District Use Permit granted
- ◆ 2014 Maunakea sublease unanimously approved by Land Board, Begins paying lease rent
- ◆ 2015 DLNR issues TMT Notice to Proceed, Protests, Supreme Court overturns CDUP
- ◆ 2016 TMT announces new timeline, Contested Case restarting, TMT investigating other sites around the world.