



North Shore Path

Alternatives Report

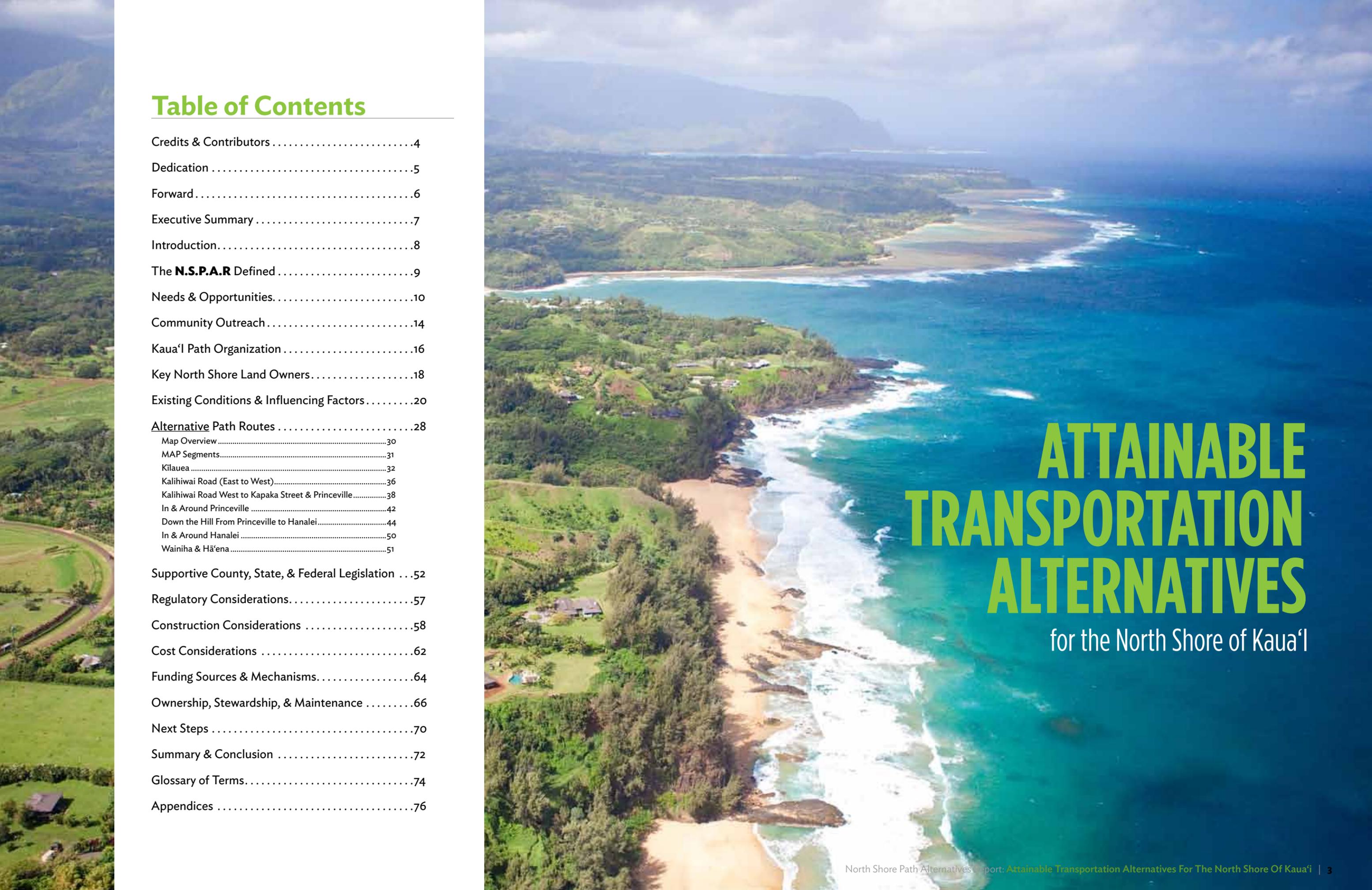
An Assessment of Opportunities & Constraints for the Development of a Multi-use Path Network to Connect the Communities of Kīlauea, Princeville, and Hanalei.



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ATTAINABLE TRANSPORTATION ALTERNATIVES

for the North Shore of Kaua’l

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Get Fit Kauai



LEAP Initiative - Live Healthy! Eat Well! Be Active! Live Pono!



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Special thanks go to the following individuals who have volunteered much of their time over the years...

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This report is dedicated in loving memory of

Merle Grimes

1957-2010

a true friend of greenways & trails



FORWARD

Allow me to extend my deepest mahalo and congratulations to all who worked to produce the North Shore Path Alternatives Report. It is a positive step toward creating more walkable, sustainable communities on the north side of our island home.

My Holo Holo 2020 vision calls for **“all organizations, businesses, residents and visitors on Kaua’i to be part of creating an island that is sustainable, values our native culture, has a thriving and healthy economy, cares for all – keiki to kupuna, and has a responsible and user-friendly local government.”** So many of our Holo Holo 2020 goals can be achieved by creating alternative modes of transportation for all communities on Kaua’i. Developing coastal, multi-modal paths are an important element in that effort. In the end, our people, our environment and our economy will benefit by putting these basic principles to work in our everyday lives.

I look forward to a continuing dialogue with interested parties on the north shore as we seek to create a community that is better connected, healthier and more sustainable for generations to come.

Mahalo nui loa,

Bernard P. Carvalho, Jr.
Mayor, County of Kaua’i

EXECUTIVE SUMMARY

The North Shore Path planning effort seeks to create a network of inter-linking bicycle and pedestrian trails to connect the communities of Kīlauea, Princeville, and Hanalei. The goal is to create a critical, viable, and vibrant component of a multimodal transportation system, which will lessen our dependence upon cars while at the same time promoting healthier, more active lifestyles. Greenway trails will create opportunities for people to get out and about, meet with one another, and build ties across our local communities.

The proposed path networks are not envisioned as the widening of our existing roadways. Rather, they are foreseen as separate greenways or “linear parks”, isolated from roadways to the greatest extent possible, where people can safely ride to work, walk to school, push baby carriages, and exercise with friends. The trail corridors will forever be green, thus preserv-

ing open space and/or preserving ribbons of parkland in areas where development is most likely to occur.

As you read this report, bear in mind that the NSPAR is a grassroots planning effort -- created for our communities by people who live, work, and raise their families on the North Shore. The NSPAR is not a plan with rigid, defined outcomes; rather it an assembly of ideas and possibilities that have been researched and brought forth through a number of years of public outreach and community input. The Path route alternatives described are intended for further discussion, environmental analysis, feasibility assessment, and additional planning. Therefore, this report is a starting point, not an end. It is intended to engage community members, law makers, politicians, and potential

funding sources as to the possibilities that exist, and to make them manifest in the most beneficial manner for all concerned. Please read this report with an open mind and an open heart, knowing that there is still ample opportunity for input.

“Think Globally and Act Locally.”



Ben and Friends

Ho‘o laulima
Lets work together...

INTRODUCTION

Change is happening around the globe. Worldwide population is reported to have surpassed 7 billion people in 2011. As populations swell, so do the impacts upon our resources and the environment. We see this change everywhere here at home on Kaua'i – there are more cars, more visitors, new residents, and the miraculous birth of new keiki with their whole lives ahead of them. For all of our sake, and more than ever before, we need to make conscious, collective choices which will enhance our lives while at the same time reduce our burden upon the natural resources which we all hold so dear. Change is happening – with effort and cooperation we can make for a positive future...

The North Shore Path effort seeks to protect our environment, lessen our dependence upon imported fossil fuels, strengthen the underlying fabric of our communities, and improve the health of our families through the creation of a network of non-vehicular walking and biking paths (a.k.a. “multi-use” paths). The goal is to eventually link together the communities of Kīlauea, Princeville, and Hanalei so that one can easily get from one village to another without a car. It is a rather simple idea with far-reaching implications that could positively change the way we live on a

day-to-day basis. The ideal is one in which it becomes more convenient, enjoyable, healthier, and possibly faster to ride a bike from Princeville to Hanalei than it would be to jump in a car. So convenient in fact, that you might make the trip twice the same day – once in the morning to accompany your child to Hanalei School and again in the afternoon to pick up your mail and meet a friend. The potential benefits of the North Shore Path are many and will be covered in detail within this Report.

This Report and the North Shore Path effort are born upon a spirit of optimism and hope. Kaua'i is such a special place – our water is abundant, our 'āina is rich, our population is relatively small, and our environment is both vital and pure. Add to this a large amount of undeveloped open space, as well as community and political leaders who are working together toward progressive change, and one cannot help but feel encouraged about the future of our island home.

The North Shore Path is an idea whose time has come.
I Mua!

THE N.S.P.A.R DEFINED

This North Shore Path Alternatives Report (“NSPAR”) is a visioning document. Its goal is to put forth a number of ideas and possibilities, and thereby, to simulate a healthy, enthusiastic, and informed discussion among community members, political leaders, regulators, landowners, interest groups, and potential funding sources regarding the North Shore Path. As was stated earlier, the NSPAR is not a plan. It does not make specific recommendations. Rather it offers and evaluates the opportunities, challenges, and alternatives that have become evident through extensive research and community input. The NSPAR is a grass-

roots effort. The Report has been prepared for the benefit of our local communities, by members of our communities, and is the result of many years of effort.

A primary objective of this report is to identify and distinguish the existing physical, legal, and land-use conditions which will influence the feasibility of developing a comprehensive and complete multi-use path network. The end goal is to suggest “the path of least resistance” which pays most respect to the environment, the host culture, and the rural character of the North Shore.



NEEDS & OPPORTUNITIES

The benefits to our communities of a multi-use path system are many; this section outlines in detail the needs and opportunities that are present.

REDUCTION OF AUTOMOBILES & EMISSIONS

Simply put, more people biking, walking, and using public transit will reduce our dependence on cars. It will lessen the number of cars on our roads and within overflowing parking areas at our local beaches.

HEALTH, RECREATION, & FITNESS

The convenience, accessibility, and outdoor character of a well-designed network of multi-use paths will improve the overall physical, psychological, and social health of our communities. Heart disease, obesity, diabetes, and other common ailments caused by a lack of exercise will diminish significantly, and the associated costs burdening our health care system will

decrease. Walking and biking paths promote active lifestyles, and community members benefit from regular exercise as they go about their day-to-day activities.

REDUCED DEPENDENCE UPON FOSSIL FUELS

In step with a reduction in cars is a lessening of our dependence upon fossil fuels. Around the world, our appetite for oil has manifested itself in countless negative ways – smog and pollution, global warming, endless wars, and monumental oil spills with devastating ecological consequences. It is time to shift away from our deadly dependence upon oil. This reality becomes ever-more present as petroleum reserves dwindle and the price at the pump continues to rise. A well conceived multimodal transportation system for the North Shore is

a BIG step in right direction.

QUALITY OF LIFE

A network of linear parks would touch many more neighborhoods than do traditional parks and/or nature preserves. Paths bring people together to commune and play. In this way, trails promote community and offer residents a cost-free place to get outdoors and exercise close to their homes. Residents young and old, rich and poor, fit and disabled can all enjoy the trails with one another. The end result is happier people with higher self-esteem. Everyone benefits.



ON KAUA'I WE HAVE TOO MANY CARS!



SAFE ROUTES TO SCHOOL

Imagine sending your children off to school with the peace of mind that they will be traveling on a safe route with no cars and/or with effective safety improvements along roadway corridors. This is a reality that we can achieve. The days of shuttling keiki from one place to another exclusively by car can be a thing of the past. Safe routes in, around, and between our communities will greatly benefit our kids and free up important time and resources for their caregivers.

<http://www.saferoutesinfo.org/>

TSUNAMI EVACUATION

In 2011 we witnessed, yet again, the devastating impacts that a tsunami can have. Rapid response time in an emergency event can mean the difference between life and death. A network of multi-use paths can provide alternative emergency evacuation routes for the North Shore.

ALTERNATIVE OUTDOOR RECREATION

As we see our island population grow, it is often most evident in the crowding at local beaches. Walking and biking paths will provide residents and visitors with a great alternative to going the beach. This will effectively relieve some of the crowding at our beaches and diversify outdoor options. The same can be expected for the crowding in parking lots, wherever they may be.

SMART GROWTH - INTEGRATED LAND USE & TRANSPORTATION SOLUTIONS

Smart Growth is an urban planning and transportation methodology that aims to concentrate growth in compact, walkable communities and avoid the negative impacts of sprawling rural development. Recognizing that growth is inevitable, Smart Growth proponents advocate for maintaining open space while focusing additional development within or close to our established town centers. Integral to the success of Smart Growth is a multimodal transportation system combined with mixed-use development, and a range of housing choices across all income levels. The North Shore Path is a very sound, core element of Smart Growth planning which will help to “Keep Kuaʻi’s Country – Country.”



ECONOMIC BENEFITS

The development of a network of multi-use paths will result in the creation of new businesses and environmentally oriented jobs. A new bike shop or two will likely open. There will also be an increased demand upon existing retailers, restaurants, and local services. The North Shore Path will provide new opportunities in eco-tourism, shifting visitor dollars away from the gas pump and into the pockets of local entrepreneurs. For local residents the Path will likely translate into significant transportation cost savings (for automotive and fuel costs). For our government, the trail system will generate sales tax revenue and will help to reduce the wear and tear on existing roadway infrastructure. The widespread economic benefits of multi-use path systems are well documented in research studies across our country – the long-term benefits far outweigh initial development costs.

CRIME

Although some people have expressed concerns that paths in our communities will increase crime rates, studies have shown that regional trails either reduce or have no measureable effect on criminal activity.



COMMUNITY OUTREACH

PAST, PRESENT, & FUTURE

Fundamental to any good planning effort is the breath of its community outreach. By providing community members with numerous occasions to become informed and involved (both publically and privately), and frequent opportunities to provide their input, the North Shore Path is off to a good start. However, for those who are only now learning of the project and have yet to participate in community discussions, rest assured, there will be ample opportunity for more discussion and input.

NORTH SHORE PATH WEBSITE - A COMMUNITY PORTAL

As part of the NSPAR planning process, a project-specific website was created. To view the site, go to: www.NSPath.Kaua'istyle.com.

The North Shore Path website went live in May of 2011, and as of this writing, has had over 2,165 unique visitors. Site visitors will find information about the project, numerous links to the community input survey, a Facebook link, a donations link, recent events, a planning timeline, and a link to the Kaua'i Path website. The North Shore Path webpage will continue to evolve with the project and will be updated as time and resources allow.

FOLLOW US ON FACEBOOK

Concurrent with the website creation, a Facebook page for the North Shore Path has been created to tap into the growing power of social media networking. It is hoped and anticipated that the Facebook presence will encourage more youth and teens to take an active role in the planning effort. As of this writing over 116 people have expressed their support for the North Shore Path on Facebook.



COMMUNITY MEETINGS



As is detailed in the project timeline (Appendix 1), there have been numerous community meetings so far. Additional community meetings will be scheduled in 2012 following the publication of this North Shore Path Alternatives Report to discuss its findings and determine the most appropriate next steps for the planning process.

OUTREACH: COMMUNITY INPUT SURVEY

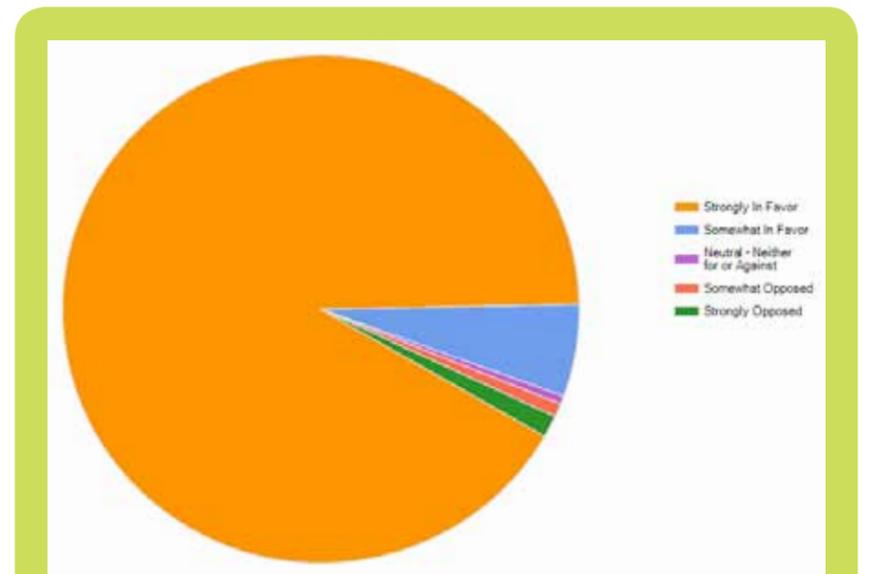
From day one, visitors to the website have been encouraged to take a survey about the North Shore Path. The survey takes about 5 minutes to complete and contains both general and specific information about the Path planning effort. In order to build traffic to the website and increase survey responses among community members, over 4,500 postcards were printed and mailed out in May of 2011. The cards were sent to all registered mail recipients on the North Shore. Included were people who live in Waipakē, Kīlauea, Kalihiwai, 'Anini, Princeville, Hanalei, Wainiha, and Hā'ena. Aware that not everyone receives mail through the U.S. Postal service, flyers and postcards were posted on community bulletin boards and distributed through local retailers and at community events. The goal was to reach out and provide everyone who lives on the North Shore with information about the project and an opportunity to share their input. To further increase public participation, a brand new bike was given away by a lottery drawing which consisted of all survey respondents who completed the survey by July 31st, 2011. Wendy Sherman, a Kīlauea resident, was the lucky survey winner.



Wendy Sherman won a bike!

SURVEY RESULTS

As of December 1st, 2011, 578 people had responded to the North Shore Path survey. Of those who responded, 91.3% expressed that they were "strongly in favor of a network of shared-use paths". Another 5.9% were somewhat in favor, while only 2.3% expressed opposition. Although the lottery deadline for the survey has ended, the survey itself has no deadline and is ongoing. Therefore, anyone who is interested in the project is encouraged to get online and share their input. So far, the survey has proven to be a worthwhile effort and a great success. The overwhelming support for the project is very encouraging. In addition to multiple-choice questions, the survey gives respondents opportunities to type in their comments.



Question:

In general, are you in favor of OR opposed to the creation of a network of shared use paths (for biking, walking, and other non-motorized modes of transportation) to link together the communities of Kilauea, Princeville, & Hanalei?

A summary of the survey results is included in Appendix 2.

KAUA'I PATH ORGANIZATION

Kaua'i Path, Inc. is a grassroots, non-profit organization which holds the vision of Kaua'i residents working together to preserve, protect, and extend access island-wide through the design, implementation, and stewardship of non-motorized multi-use paths. A board of directors leads Kaua'i Path. Several interest groups and regional committees participate in various project efforts and report back to the Board. These committees manage such things as the Path Ambassadors and Friends of the Path programs, fundraising, volunteer activities, community outreach, and regional planning efforts. The North Shore Path Committee has been instrumental in catalyzing this NSPAR planning effort.

Through its Board of Directors

and executive officers, Kaua'i Path is continuously interacting with our elected officials and regulatory agencies at the County, State, and Federal levels to advance the goals of the organization. Over the years, Kaua'i Path has played an instrumental roll in the planning and development of the multi-use path on the eastern coast of Kaua'i. Known as Ke Ala Hele Makalae ("The Path that Goes by the Coast"), the East Side path currently consists of approximately 6.6 miles of constructed ADA-compliant paths with additional phases under construction and/or in the planning and permitting process. Eventually it is hoped that Ke Ala Hele Makalae will offer an uninterrupted connection between the townships of Līhu'e, Kapa`a, and Anahola.

The genesis of Kaua'i Path occurred when our late mayor, Brian Baptiste, convened a group of citizen volunteers to help develop an island-wide plan for protecting public access. Building upon the committed membership and extensive volunteer efforts of the Friends of Kamalani (playground), this citizen group evolved into the Kaua'i Path Organization. In January of 2011, Kaua'i Path was awarded an independent 501(c)3 non-profit status with the Internal Revenue Service. This represents a significant step in the maturity and accomplishments of the organization.

The North Shore Path planning effort is strongly supported by Kaua'i Path. Funding for this Report was actively pursued by its Board of Directors in 2009 and 2010 and

was made possible by a grant from the Federal Centers for Disease Control (CDC), Communities Putting Prevention to Work (CPPW) initiative in collaboration with the State of Hawai'i, Department of Health. The private/public partnerships that Kaua'i Path has established over the years will go a long way toward the goals expressed in the NSPAR. Furthermore, the lessons learned, both good and bad, through the development of Ke Ala Hele Makalae will guide our North Shore communities to do an even better job in designing and constructing our own shared-use path network.



Thanks Kaua'i Path! Our community wouldn't have made it this far without you!

For more information go to: www.Kauaipath.org.

KEY NORTH SHORE LAND OWNERS

UNCOMMON AND FORTUNATE CIRCUMSTANCES

One of the most encouraging and beneficial circumstances on the North Shore of Kaua'i is that, rather than dealing with hundreds of individual private property owners, in some cases as few as eight (8) large landowners can collaborate to complete a path between Hanalei, Princeville, and Kīlauea. This is uncommon in our day and

age, and is incredibly promising. By contrast, one of the most challenging, time-consuming, and therefore expensive aspects in developing Ke Ala Hele Makalae has been dealing with multiple landowners, their many concerns, and individual interests. Along with multiple owners comes a much more complex web of public infrastruc-

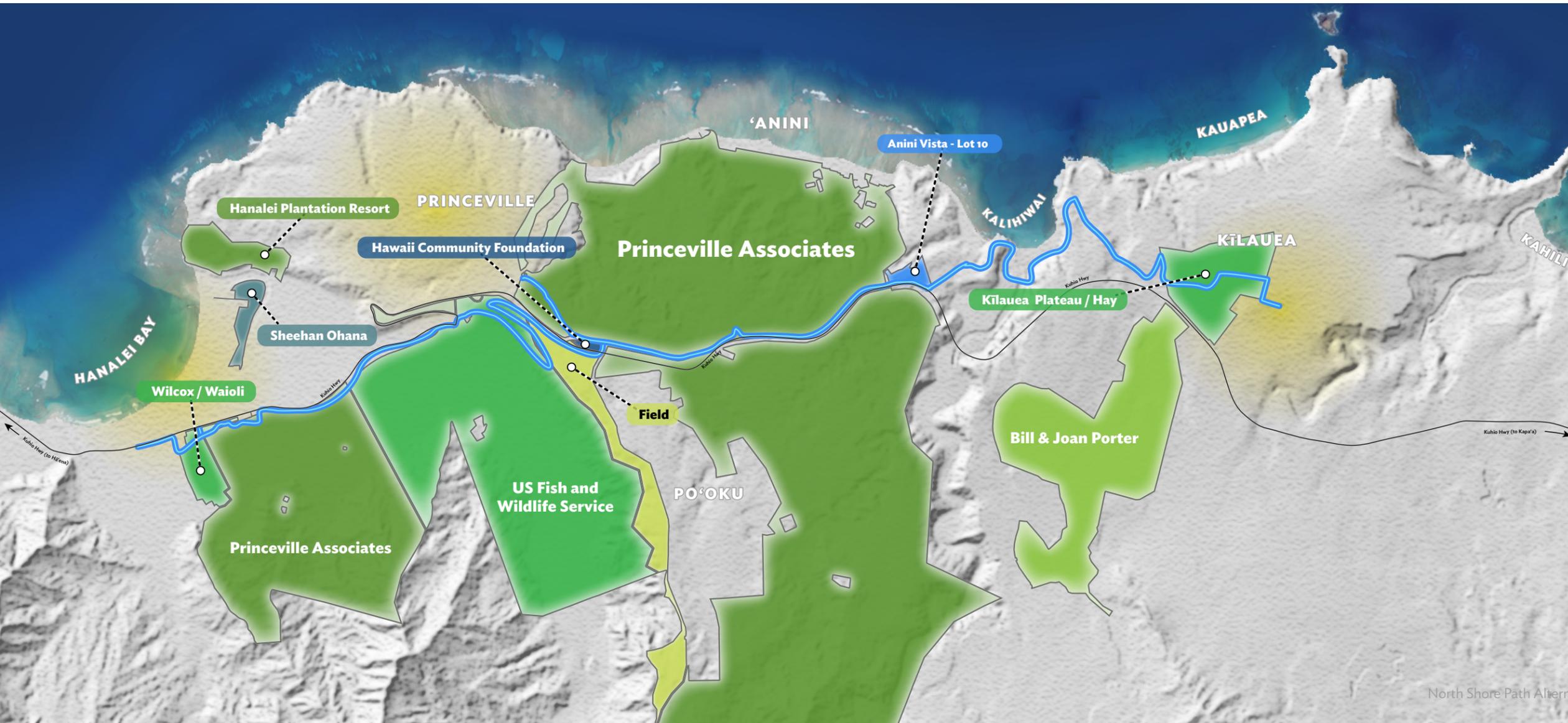
ture and established land uses – i.e. existing easements, driveways, power-poles, legal agreements, etc. The abundance of relatively undeveloped open space between our towns coupled with the land ownership landscape makes the North Shore Path very viable.

Collaboration

As few landowners as there are, there will nonetheless be significant community issues that will arise as multi-use path plans are pursued. Princeville Associates, LLC, the largest and most critical landowner along the Path, is an investment group which seeks to develop portions of its lands in order to generate profits for its members. By collaborating with large landowners like Princeville, our communities and our government leaders can preserve important access routes and create new connectivity, while encouraging the implementation of development projects that are consistent with multimodal, Smart Growth principles. The outcome can be win-win, especially if planning and development take a long-term perspective on balanced growth, and if higher-density, town-centered projects are given priority over those projects that would seek to develop rural, open space lands.

It is helpful to keep in mind the developed environments that human beings consider idyllic and special. The quaint, ancient, walkable villages of Europe come to mind – iconic places that were built long before cars were ever present. Hanalei definitely fits the mold for a self-contained and walkable community, as do both Kīlauea and Princeville. If we could significantly reduce the number of cars in our town centers and replace them with bikers and walkers, then our communities would be that much more magical. Readapting portions

of our existing infrastructure and developing a North Shore Path network, coupled with some very simple behavioral changes, has the potential to profoundly alter how the North Shore will look, develop, and feel in the near and distant future. Through smart, collaborative planning efforts, landowners can be incentivized to undertake sustainable projects. It will take communities working together to realize these important goals.



This map paints a very clear picture of the encouraging land ownership landscape of the North Shore.

EXISTING CONDITIONS & INFLUENCING FACTORS

True to its title, the North Shore Path Alternatives Report aims to identify a number of alternative path routes and linkages between our North Shore communities. The goal of this report is to stimulate important community conversations about the various alternatives and their associated benefits and potential impacts. In the following sections, this Report will identify and discuss the host of existing cultural, environmental, and land use conditions that will need to be considered in determining the path of least resistance – that which is most appropriate for and beneficial to our communities.

Cultural & Historical Considerations

The North Shore of Kauaʻi is a very special and unique place. It is steeped in ancient history and fondly recounted in numerous Hawaiian mele (songs/chants) and moʻolelo (legends). From ancient times to present times, all people feel a deep awe and respect when they cross over the river into Hanalei. No less special are Kalihiwai, Kauapea, and ʻAnini. Respecting cultural traditions and values while preserving sacred sites is an important goal of the North Shore Path project.

THE ANCIENT ALALOA & ALAHELE

Before there were cars and roads, footpaths provided the connections between residents, their natural resources, and neighboring villages. In Hawaiʻi these footpaths were known as the alaloa (long roads or main roads) and alahele (pathways), and their existence is well documented in recorded map archives and title documents. An example of a government survey map from 1878, showing a portion of the old alaloa on the North Shore is shown below. In modern times, some of these alaloa and alahele



have been transformed into the coastal and inland roadways that we now know and use. Others may be overgrown, presenting opportunities for rediscovery and reuse. Whatever the case may be, the Hawaiian host culture once used footpaths as a means of transit. In this way, the North Shore Path respects the past and aims to preserve public access for all people and future generations.

HEIAU AND OTHER SACRED PLACES

Negative and/or culturally inappropriate impacts to heiau and places held sacred to the Hawaiian people will be avoided at all times by the North Shore Path. If and when path segments are developed, all eventual routes will provide ample buffers around cultural resources.

IWI KUPUNA (ANCESTRAL BURIALS)

Again, negative impacts to ancient Hawaiian, post-contact, and modern burials sites will be avoided at all costs. For this reason, most alternative path routes are suggested inland, away from the common coastal burial areas of the past. The difficult lessons that have been learned at Naue in Hāʻena and in Wailua are to be avoided. Significant burial impacts are not anticipated.

OUR ʻĀINA - SACRED THEN, SACRED NOW

The North Shore Path recognizes that the ʻāina (land) is in and of itself perhaps the most sacred

and cherished of resources. The land is the well-spring from which all life and beauty are born. This planning effort seeks to care for the land and respect the Hawaiian value of mālama ʻāina.

WAI - WATER

Wai is the Hawaiian word for fresh water, which the Hawaiian culture identifies with wealth. By example, waiwai means prosperity. The Hawaiians believed that the land and water belonged to the gods, and they recognized that a healthy, unpolluted, and abundant supply of fresh water was vital to the health of their communities. This recognition is as true today as it was in ancient times. Protecting fresh water resources is of critical importance, and the North Shore Path planning effort will need to carefully evaluate and avoid negative impacts to water resources.

HANALEI TARO FARMS

The taro patches (loʻi kalo or loʻi ai) of Hanalei are very special and treasured resources. The view when crossing the Hanalei Bridge is imbued with the most powerful spirit of nature. Perpetual preservation of the loʻi kalo is of critical importance. It is reported that Hanalei Valley (presumably including Waiʻoli, Waipā, and Waikoko), has the largest area of taro cultivation in the world. This should never change. Legends recount that the kalo plant is believed to have given birth to the ancestors of the Hawaiian people. The strong cultural

and spiritual bond with the loʻi kalo of Hanalei is recognized and will be considered in all planning efforts.

THE STATE HISTORIC PRESERVATION DIVISION (SHPD)

The SHPD is a Division of the State, Department of Land and Natural Resources (DLNR), which is responsible for administering the historic preservation review process as specified in Hawaiʻi Administrative Rules (HAR) 13§13-284. The SHPD keeps detailed historical records in its database, along with archives of both cultural and archaeological surveys. The SHPD works with State and County government, island burial councils, planners, community groups, and private landowners to ensure that historical resources are being identified and properly cared for.

As part of the NSPAR planning process, Datawise Consulting conducted a preliminary investigation at the SHPD, spending a full day reviewing the offices' GIS and associated reports to ensure that the proposed routes do not infringe upon known archaeological or cultural resources. As the North Shore Path planning effort moves forward, additional research will be required to identify and avoid negative impacts to cultural and archaeological resources. As path alternatives become clear, detailed surveys will be carried out before routes can be finalized. Kupuna will need to be consulted, as will farmers, gatherers, fishermen, and other cultural practitioners.



Environmental Considerations

WETLANDS

The taro farms, while culturally significant, are also of vast ecological importance. Most (if not all) of the land between the Hanalei Bridge and the town itself is considered both a floodplain and a wetland. These wetlands serve the important natural functions of filtering pollutants and silt during heavy rains; they also mitigate flood impacts and provide critical open-space habitat for a number of endangered bird species.

The wetland resources of the North Shore must be preserved and crossed by the North Shore Path with extreme care. By utilizing existing berms and raised topography within wetland areas, it is anticipated that negative impacts

can be largely avoided and/or effectively mitigated. Community members have suggested that some raised boardwalks could be constructed in wetland areas – examples of boardwalks can be found in Kokee and in numerous wetland settings throughout Hawai'i and the mainland. Sections of boardwalks would offer an educational opportunity for path users to experience wetland habitats and thereby learn of their ecological importance.

NO NET LOSS

No Net Loss is a Federal U.S. Policy regarding wetlands preservation, the goal of which is to balance the loss of wetlands with wetlands reclamation, mitigation, and restoration efforts.

The end goal is one in which the total acreage of wetlands remains constant or even increases. Since dense non-native vegetation has aggressively overtaken many wetland areas on the North Shore, there will likely be opportunities in the Hanalei Valley and elsewhere to implement an effective no net loss program. Such areas could be restored to create additional wildlife habitat. Lo'i ai could also be reclaimed or created.

The most important legislation regarding wetlands is the Clean Water Act (CWA) of 1977, which regulates discharges of dredged or fill material into wetlands and other waters of the U.S. (CWA Section 404). This program is administered by the U.S. Army Corps of Engineers (USACE).

NATIONAL WILDLIFE REFUGES

The United States Fish and Wildlife Services (USFWS) owns and manages two large and important wildlife Refuges on the North Shore of Kaua'i.

The Hanalei National Wildlife Refuge, consisting of approximately 917-acres, was established under the Endangered Species Act to conserve four endangered water birds that rely on the Hanalei Valley for nesting and feeding habitat: the koloa maoli (Hawaiian duck), the 'alae ke'oke'o (Hawaiian coot), the 'alae'ula (Hawaiian moorhen), and the ae'o (Hawaiian stilt). The Refuge also provides habitat for the endangered nēnē (Hawaiian goose) and Hawaiian Hoary bat. Nine taro farmers have been issued USFWS special use permits to carry out farming activities within the Refuge in a manner that is compatible with the stated purpose of the Refuge.

Kīlauea Point National Wildlife Refuge, consisting of approximately 203 acres, the Kīlauea Refuge is visited each year by thousands of migratory seabirds which use the Refuge for nesting, foraging, or resting. Among these are the Laysan albatross (mō'ī), red-tailed and white-tailed tropic birds (koa'e 'ula & koa'e kea), great frigatebirds ('iwa), and Newell's shearwaters ('a'o).

The mission of the USFWS is to “work with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats...” This mission statement establishes a priority for wildlife protection whenever considering the economic, developmental, and/or social interests of a particular action or project. Therefore, in order for the North Shore Path project to succeed, a collaborative planning effort must be undertaken with the USFWS. Fortunately, the beginnings of such collaboration is already taking place.

In preparing the NSPAR, Landmark Consulting has met with USFWS refuge managers to discuss the Path project and its goals. As chance would have it, both the Hanalei and Kīlauea Refuges, are currently involved in a Comprehensive Conservation Plan (CCP) process. Among other things, the CCP will consider and evaluate various transportation solutions for access to and within the Refuges. Therefore, the simultaneous occurrence of the NSPAR planning process with the CCP process provides very favorable circumstances, which hopefully will result in open communications about the various alternatives, so that the most beneficial, win-win outcomes can be supported by both Refuge management and our communities.

FLOOD ZONES

Low lying areas in Hanalei, 'Anini, and Kalihiwai are located in established flood zones where tsunami inundation and/or stream flooding are possible. Generally, path projects are compatible with flood zones since most improvements (the pathways themselves) are ground-hugging and do not impede flood waters. In some cases, flood studies may be required if proposed path improvements alter, increase or redirect flood waters. Human safety concerns will need to be addressed as well.

SHORELINE AND NEARSHORE AREAS

For the most part, the route alternatives put forth in this Report are remote from shoreline. This is a proactive planning measure which recognizes that development near the coastline poses many challenges and concurrent environmental concerns. Along the coast, there are the hazards of erosion, sea-level rise, and flooding. Native Hawaiian burials tend to be more concentrated in the shoreline vicinity, private property values are higher, and critical habitat concerns are many. For these reasons, a multi-use path situated predominantly along the coastline is an unlikely outcome on the North Shore.

STEEP TOPOGRAPHY

Topography (land contour) is one of the most influential existing conditions that will dictate where pathways are most feasible on the North Shore. If paths are too steep, then people with average or below-average fitness levels will not be as likely to use and benefit from them. Furthermore, in order to be compliant with ADA (Americans with Disabilities Act) guidelines, multi-use path slopes should not exceed a 5.0% gradient. One of the primary goals of the North Shore Path is to develop paths that are accessible to and practical for as many people as possible.

The steep slopes of Kalihiwai, 'Anini, and Hanalei have been evaluated and identified within this Report to suggest gradual path route alternatives. However, in all cases, steeper slopes cannot be entirely avoided, therefore the most likely outcomes will be achieved through various trade-offs and the implementation of appropriate design solutions. It is suggested in this Report that the steep descent from Princeville to Hanalei can be effectively and safely accomplished with a series of long, gradual switchbacks. Besides making for an easy transition, this section of the path, if so developed, would provide for incredible views of the Hanalei Valley. It could become an amazing and enjoyable section of trail that could have numerous rest stops with panoramic view points along



its course – thereby transforming the challenge of steep topography into a positive outcome.

Constructing paths on steep slopes is significantly more expensive than on level ground. Furthermore, steep slopes increase erosion, rock fall and safety concerns. Therefore, the alternative path routes suggested in this Report take advantage of flatter ground wherever possible.

STREAM AND RIVER CROSSINGS

There are numerous small streams and natural drainages, as well as two significant rivers that will need to be crossed in order to realize the goal of connecting pathways between Kilauea and Hanalei. All waterways, big and small, will need to be crossed with least impact to aquatic resources. The use of existing infrastructure is therefore

suggested for the crossing of both the Hanalei and Kalihiwai Rivers. New bridges may be feasible as well, but they would require more extensive environmental permitting, and would come at a significant expense.

Specific discussions regarding stream crossings are covered in greater detail in the alternative route descriptions.

VIEW IMPACTS

Since most of the improvements associated with pathways are built close to the ground, negative view impacts should be very limited. The most significant view impacts will likely result from any pavilions, restrooms, bridges, gates, fencing, or other such improvements that may be constructed. Nonetheless, visual impacts should be relatively easy to mitigate. Pathways are likely to blend into (and even enhance) views of the natural landscape.

VIEW ATTRIBUTES

View perspectives from the North Shore Path are an important consideration as well. Great views of nature are uplifting to the human spirit and will enhance a sense of well-being for trail users. The more beautiful the views along a trail, the more likely that people will use it. Views of the ocean, mountains, streams, and valleys should all be prioritized whenever possible. On the flip side, the path should avoid view planes that are compromised by power lines, roadways, cars, and other developed or unsightly infrastructure. For this reason, view buffers should be encouraged between path corridors and adjacent developed areas whenever feasible.

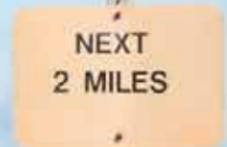
PLANTS & WILDLIFE

The North Shore Path project, like any proposed development effort, will need to identify and protect plant and wildlife resources and their critical habitats. It is not anticipated however that any critical habitats need be negatively impacted. Environmental impact assessments will likely be required as specific Path routes progress toward the design and implementation phases.

EROSION, SILTATION, & STORM-RUNOFF

Wherever and whenever development occurs, there is the potential for the associated negative impacts of erosion, siltation, and increased storm water runoff. However, through proper planning & engineering, and in conjunction with sound environmental Best Management Practices (BMPs), all such negative impacts can be effectively mitigated. As mentioned earlier, erosion concerns will be heightened in areas of steep topography; therefore, preventing erosion is one of the factors which contributes significantly to increased costs in sloped areas.

It is important to bear in mind that the environmental impacts of creating biking and walking paths will be far less than those currently associated with our myopic dependence upon automobiles.





Other Considerations and Influencing Factors

Additional factors that should be considered in determining the most optimal path routes and/or networks for the North Shore.

TRIP GENERATORS

Quite simply, a Trip Generator is defined as a location where a trip begins or ends. If you leave your house to go to the beach, then both your house (the point of origin) and the beach (the destination) are considered Trip Generators. A North Shore Path network should be designed in such a way as to connect as many Trip Generators within the community as possible (i.e. schools, beaches, stores, residential areas, etc.).

PROXIMITY TO PATH USERS

The more accessible paths are, the more likely that people will use them. Convenience encourages use. Therefore, a North Shore Path network should be designed to integrate into existing and planned residential neighborhoods to the greatest extent possible.

PRIVATE PROPERTY ISSUES

As alluded earlier, private property owners can present significant challenges to the objective of developing an interconnected path network. However, the predominant situation on the North Shore (that of a few, very large landowners) is quite favorable. It is hoped that the North Shore Path effort can provide win-win outcomes for private landowners and communities alike. Toward this end, an initiative to further engage key landowners in the North Shore Path discussions should be made as a critical next step in the planning process.

EXISTING ROADWAYS, PATHS, INFRASTRUCTURE, EASEMENTS, & RIGHT-OF-WAYS (ROWS)

To the greatest extent possible, planning efforts should consider existing public easements, paths, Right-of-Ways (ROWS), and facilities so as to integrate these into the suggested route outcomes whenever appropriate.

FUNDING OPPORTUNITIES

In some instances, funding sources may influence where path routes will be developed, as well as what physical form or character they will take on. By working with multiple potential funding sources, the best and/or most attainable opportunities will “rise to the top.”

PLANNED OR PENDING DEVELOPMENT

To the greatest extent possible, the North Shore Path should be integrated into all land use planning efforts and development projects and. This is true for all residential, resort, and commercial projects. Before (or concurrent with) the granting of land use approvals, subdivisions, zoning changes, and/or entitlements, the objectives of the North Shore Path and the Kaua’i Multimodal Land Transportation Plan should be considered, integrated, and implemented. Guidance should be taken from the Kaua’i General Plan, the North Shore Development Plan, and the Kīlauea Town Plan.

ALTERNATIVE PATH ROUTES

Based upon the research carried out, the community input thus far received, and the existing conditions and influencing factors previously discussed, this Report will now objectively describe the various alternative path routes which appear to present the most viable connections between the communities of Kīlauea, Princeville, and Hanalei. The end goal is to identify the “path of least resistance,” least impact, and greatest benefit. A concurrent goal, as expressed earlier, is to stimulate a positive, inclusive, and productive planning discussion to further evaluate these alternatives. Therefore, whenever possible, multiple alternative routes are presented. The idea being, that in most cases there may be more than one viable route that should be considered to connect between points A & B, and that in evaluating all possibilities the best alternative(s) will become clear.

Route discussions are divided up into geographical segments. Maps are presented to best illustrate the alternative routes described.

Mapping Terminology and Corresponding Symbology:



PRIMARY PATH ROUTE

The suggested “path of least resistance” and greatest benefit between two geographical points (a segment).



ALTERNATIVE PATH ROUTE(S)

Routes which, through additional study, may prove to be the more viable. Alternative routes may be developed instead of or in addition to suggested Primary Routes.



SECONDARY OR TRIBUTARY ROUTES

Routes which feed into the Primary and/or Alternative Routes. It is helpful to think of these Secondary Routes as being analogous to the tributaries of a river. They are not the main spine of the suggested network, but will provide important, connectivity to neighborhoods, schools, parks and, community resources.



EXISTING PATHS & TRAILS

These may be integrated into Primary, Alternative, and/or Secondary Routes, or they may go unchanged.



ROAD SHARE

Describes a road system or singular Right-of-Way that is shared by cyclists, pedestrians, and automobiles. Road shares can take many forms depending upon the relative volume of motorists and other users. Traffic calming and appropriate signage can help to regulate road shares and promote user safety and efficiency.



TRIP GENERATORS

Common starting points and destinations within our communities. Good examples of Trip Generators are residences, stores, parks, schools, etc.

MAP OVERVIEW

Primary Path Alternate Paths Path Tributaries Existing Paths Road Share Roads Steep Areas Town Centers Trip Generators, Landmarks, Destinations



MAP Segments

- In & Around Princeville page 42
- Alt Princeville to Hanalei Route p.49
- Kalihiwai Road West to Princeville & Kapaka p 38
- Kalihiwai Road East p 36
- Around Hanalei page 50
- Down the Hill from Princeville to Hanalei p 44
- Around Kilauea page 32

Kīlauea

Town Center to Surrounding Areas & West to Kalihiwai

Route Discussion

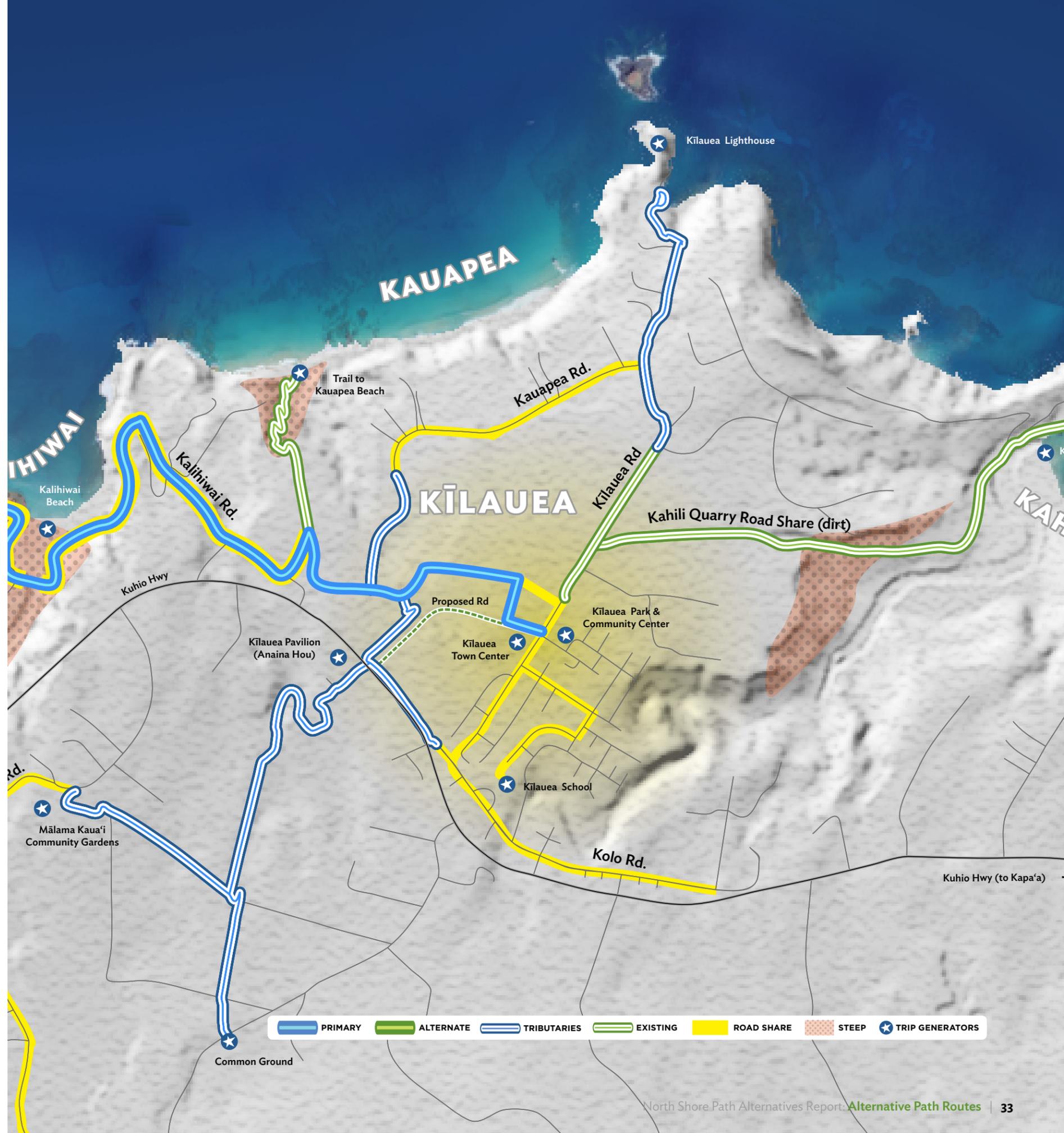
Planned development projects appear to be moving forward in Kīlauea. The Hunt Development Group, owner/developer of a 7.46-acre commercial-zoned parcel surrounding the historic Kīlauea dispensary, has submitted plans for a +/- 45,000 square foot retail development near the town center. Concurrent with this development, a new entry road to the town center is being planned. The new entry road would extend Keneke Street beyond the post office to connect with Kūhiō Hwy directly opposite the existing entrance to the Anaina Hou Kīlauea Pavilion (Bill & Joan Porter's property). At the highway intersection, a roundabout is being promoted by community members and landowners as the preferred alternative to a traffic signal or traditional 4-way intersection. Mauka (inland) of the anticipated roundabout, the Kīlauea Pavilion project is also moving forward.

Contiguous to all of this change, located just west of the town center, is the undeveloped 120-acre Kīlauea plateau property. It is upon the Kīlauea plateau that higher-density North Shore affordable housing is most likely to occur. The owners of the plateau have publicly expressed (both verbally and in writing) a willingness to donate land to the County for multi-use path routes through their property. These routes would allow for connections to the existing public access road to Kauapea Beach (a.k.a "Secret Beach") and to Kalihiwai Road. A mauka leg is also suggested with a highway crossing opposite the Kīlauea Pavilion.

Trip Generators:

- Town Center (Located at Kīlauea Road & Keneke St. Intersection)
- Kīlauea Post Office
- Kīlauea Park & Community Center
- Kauapea Beach
- Kīlauea Bay (a.k.a. Rock Quarry Beach)
- Kīlauea School
- Existing Residential Areas
- Kīlauea Pavilion (Anaina Hou) *
- Kīlauea Lighthouse Village *
- Kīlauea Affordable Housing Development *
- Kīlauea Point National Wildlife Refuge (Kīlauea Lighthouse)

* Currently in planning or permitting





Key Landowner(s)

- Kīlauea Ohana Plateau, LLC (Bill & Denise Hay et. al.)
- Bill and Joan Porter (Secondary Mauka Routes)



Alternatives In and Around Kīlauea

In addition to the suggested primary path route(s) through the Kīlauea plateau, the following alternatives, tributaries, and path goals have been identified:

- Extend and improve the existing path along Kīlauea Road from the town center northward to the Kīlauea Point National Wildlife Refuge & Lighthouse.
- Concurrent with the development of the proposed new entry road, implement traffic calming measures and improvements to Kīlauea Road and other streets within Kīlauea to make them more pedestrian and bike friendly.
- Implement a comprehensive Safe-Routes-to-School program.
- Work with private landowners to create a multi-use path connection between the northern boundary of the Kīlauea plateau property and the cul-de-sac at the end of Kauapea Road.
- Identify a road share for the existing dirt road to Kāhili Beach (a.k.a. Rock Quarry Beach).
- Promote additional integrated paths for all future housing, wildlife refuge, and commercial development projects.
- Work with Bill & Joan Porter to develop a path network mauka of Kūhiō Hwy (utilizing existing dirt roads), with connections to the Kīlauea Pavilion, Common Ground, the Stone Dam, and the existing community garden plots on Kahiliholo Road.

Kalihiwai Road (East to West)

Route Discussion

In so much as possible, the North Shore Path seeks to create pathways that are completely separate from roadways. Simply put -- bikes, pedestrians, and cars do not mix well, and all users will be happier and safer if they do not need to share a single Right-of-Way. Unfortunately however, safe and practical options across the Kalihiwai Valley are extremely limited. Steep cliffs just inland of the beach, private property challenges, narrow roads, and large volumes of fast-moving cars along Kūhiō Highway do not offer many alternatives. Therefore, what appears to be the most feasible and suggested route is a road share along Kalihiwai Road. Connecting to the Kauapea Beach access road and the Kīlauea plateau, cyclists could follow Kalihiwai Road down to the beach, along which traffic speeds and volumes are relatively low.

RESTORATION OF THE FORMER KALIHAIWAI STREAM CROSSING

The concept of restoring a bicycle and pedestrian bridge over the Kalihiwai River has been suggested by many. Of respondents to the community input survey, 96.5% expressed support for such a bridge. Kalihiwai kupuna who have participated in community meetings have also expressed their backing for this concept. The idea is to reuse the old bridge foundations, which survived the tsunami of 1957 when the bridge itself was washed out. The historic photo below, shows the bridge foundations still standing near the edges of the river immediately following the tsunami event. The County-owned ROW for this bridge is still in place. Subject to further engineering and environmental analysis, such a bridge could likely be redeveloped with very little impact to aquatic and ecological resources.



Kalihiwai bridge was destroyed in the 1957 Tsunami. Photo Courtesy Kaua'i Museum Archives

While widespread support for the bridge restoration concept has been expressed, there are also some residents who have voiced concerns about impacting the character of Kalihiwai. The positive outlook is that a road share would not require a widening of Kalihiwai Road. Furthermore, a pedestrian bridge could reduce the number of cars at the beach. This alone would help to insure that Kalihiwai's energy, strength, and rural country character could remain much the same for years to come.

West of the river, the road share could continue up the hill to the intersection with 'Anini Beach Road from which point, a separate multi-use path could recommence via an alignment parallel to Kalihiwai Road and continue up to the Kūhiō Highway intersection. The existing 'Anini Beach Road could be utilized effectively as a road share all the way to its western terminus at 'Anini Stream.



Temporary bridge at Kalihiwai erected after the 1957 Tsunami. Photo courtesy Kaua'i Museum Archives

▬ PRIMARY
 ▬ ALTERNATE
 ▬ TRIBUTARIES
 ▬ EXISTING
 ▬ ROAD SHARE
 ▬ STEEP
 ★ TRIP GENERATORS

Trip Generators

- Kalihiwai Beach
- Kauapea Beach
- 'Anini Beach
- Connection to Princeville & Hanalei
- Rural Residential Areas

Key Landowner(s)

County of Kaua'i



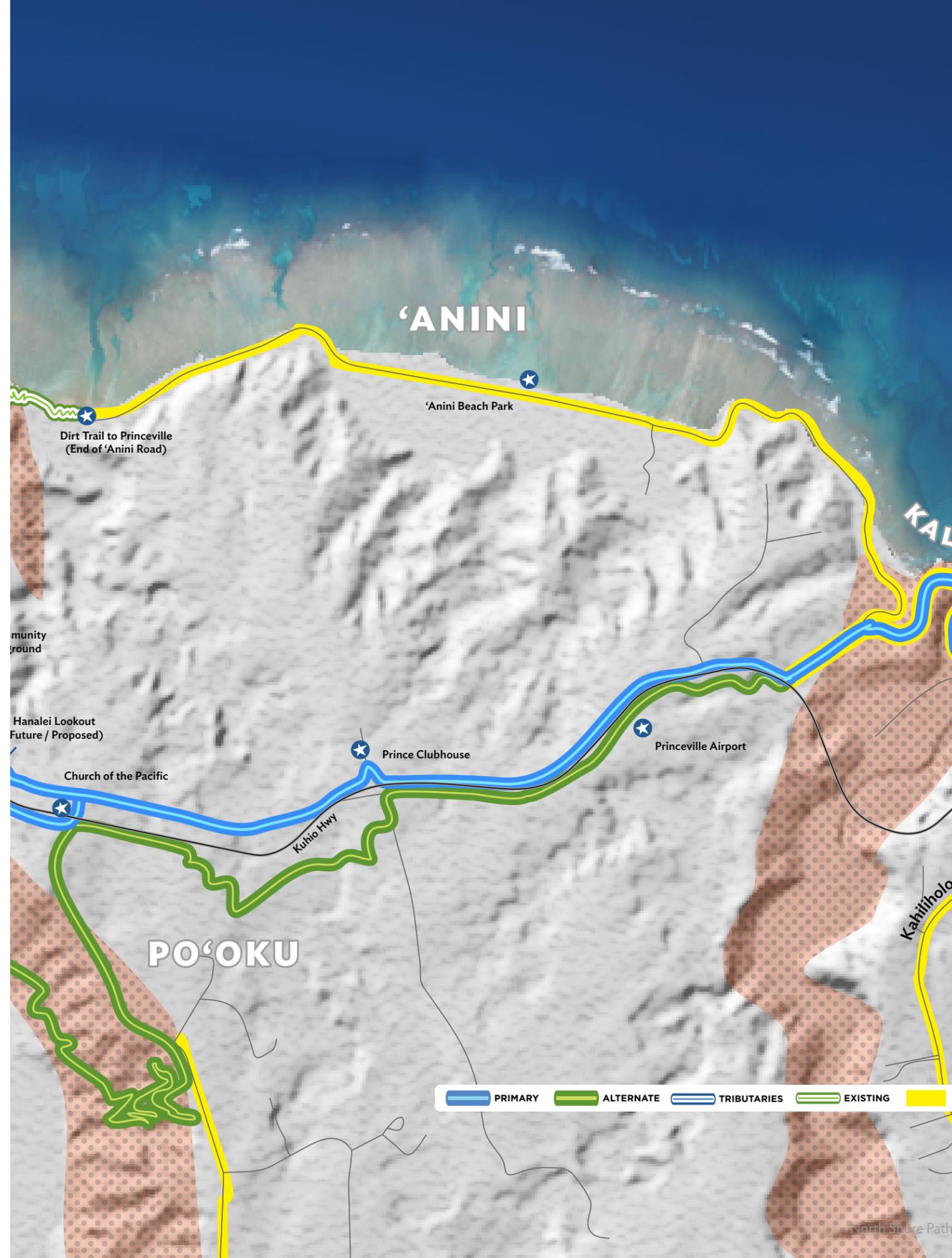
Kalihiwai Road West to Kapaka Street & Princeville

Route Discussion - Primary Route

Primary Route – avoiding a highway crossing near Kalihiwai Road, the primary suggested route would continue westward parallel to the highway through largely undeveloped land owned by Princeville Associates. In an easy, enjoyable, and meandering fashion, dictated by existing topography, the route could proceed to the Prince Clubhouse. Ideally, such a path segment would be located at least 200 feet from the highway and in some places, further still. Mountain and ocean views would be excellent. Concurrent with establishing a path Right-of-Way, there is the possibility of relocating the large, existing, overhead utility lines underground. This worthwhile pursuit would provide view plane benefits to both landowners and path users. It would also result in more secure infrastructure during hurricanes and severe storms, and would help to mitigate impacts to the endangered Newell’s shearwater. The open space character of this scenic corridor could be preserved, and the path could serve as a linear park space to buffer the residential development of Princeville’s makai lands from public view planes along Kūhiō Highway. Beyond the Prince Clubhouse, the primary suggested route could follow the old Kūhiō Highway alignment to the Church of the Pacific (near the Kapaka Street intersection). From this point, an existing bike & pedestrian path connects to the main Princeville entry near the fountain/roundabout at Ka Haku Road.

SPANNING THE HIGHWAY

From the Church of the Pacific, path users wishing to go to Hanalei could cross above Kūhiō Highway on a bike and pedestrian bridge spanning the existing excavated roadway embankments. The benefits of spanning rather than crossing the highway are significant – user safety would be much improved and vehicles could flow without interruption. This concept was favorably received in initial discussions with the State Department of Transportation.



Trip Generators

- Kalihiwai Beach
- 'Anini Beach & Park
- Princeville Community
- The Prince Clubhouse
- Church of the Pacific

Key Landowners

- Princeville Associates
- The Hawai'i Community Foundation (Church of the Pacific)
- Lots 9 & 10 – 'Anini Vista Estates

Alternative Routes

INLAND ROUTE

Crossing the highway near the western Kalihiwai Road intersection and creating a route mauka of the highway to Kapaka Street. Challenges of this alternative route include:

- Steeper and more varied topography inland of the road.
- The highway crossing itself presents a major hurdle with significant safety concerns (a tunnel or box culvert might prove to be the most feasible alternative).
- The existing Princeville Airport and safety related thereto.

‘ANINI BEACH ROUTE

An ‘Anini road share to the western end at ‘Anini Stream, and onward up to Princeville is an alternative that merits further analysis. This path segment could function well as a tributary or alternative route to aid in the goal of creating a network of paths with multiple connections. Potential challenges and considerations for this alternative route include:

- A road share is not the preferred outcome. A non-motorized multi-use path is preferred.
- The existing foot trail down from the Princeville bluff to ‘Anini Beach is extremely steep, and is well

beyond the fitness level of most people. Therefore, a beach to bluff trail would need to be extensively rerouted and redeveloped to incorporate switchbacks and periodic rest stops in order to accommodate the North Shore Path’s target demographic (all people of all fitness levels).

- An ‘Anini Stream crossing, near the beach, presents some significant environmental and engineering challenges.
- There are private property issues involving multiple owners that would need to be addressed and resolved.

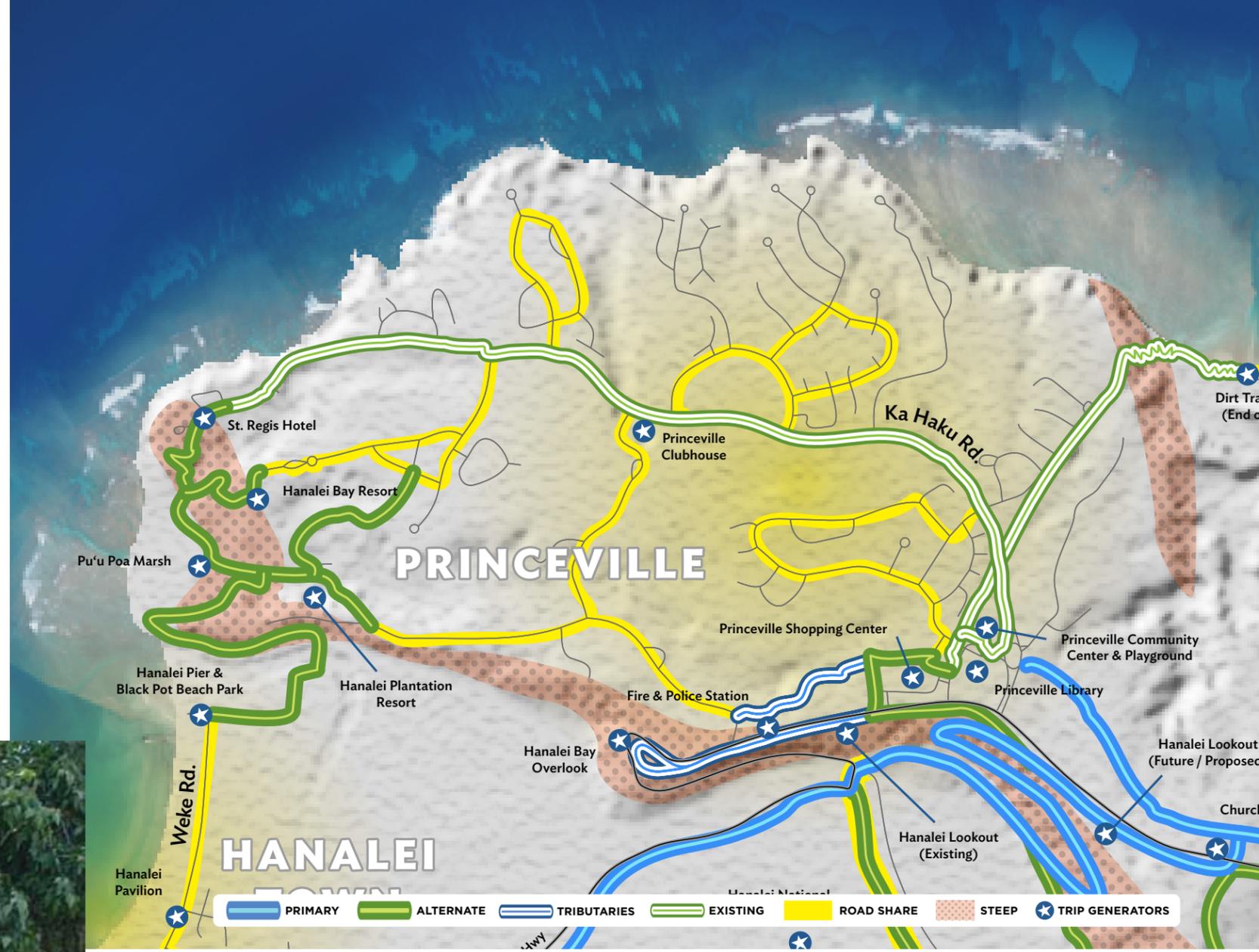


In & Around Princeville

Route Discussion

Within Princeville, the existing pathway, which runs more or less adjacent to Ka Haku Road from the Princeville Center to the St. Regis Hotel, could be widened, resurfaced, and improved for better safety and transit. The existing path is old and less than 4 feet wide in most places. Concurrently, some of the existing roadways could be adapted to better serve as safe road share alternatives with little expense. These simple steps could greatly improve connectivity within all of the existing neighborhoods of Princeville and along Hanalei Plantation Road.

The existing path and roadways within Princeville are owned by the Princeville at Hanalei Community Association (PHCA). Therefore, all changes would need to be endorsed and promoted by the PHCA. However, funding for improvements within Princeville need not come from the PHCA members. If such improvements are part of a regional multimodal planning solution, then it is possible that significant money could come from outside sources.



- Princeville Shopping Center
- Residential Neighborhoods
- Condos and Hotels
- Princeville Library
- Princeville Community Center & Playground
- Golf Clubhouse, Pool, & Tennis Courts
- Restaurants

Key Landowner(s)

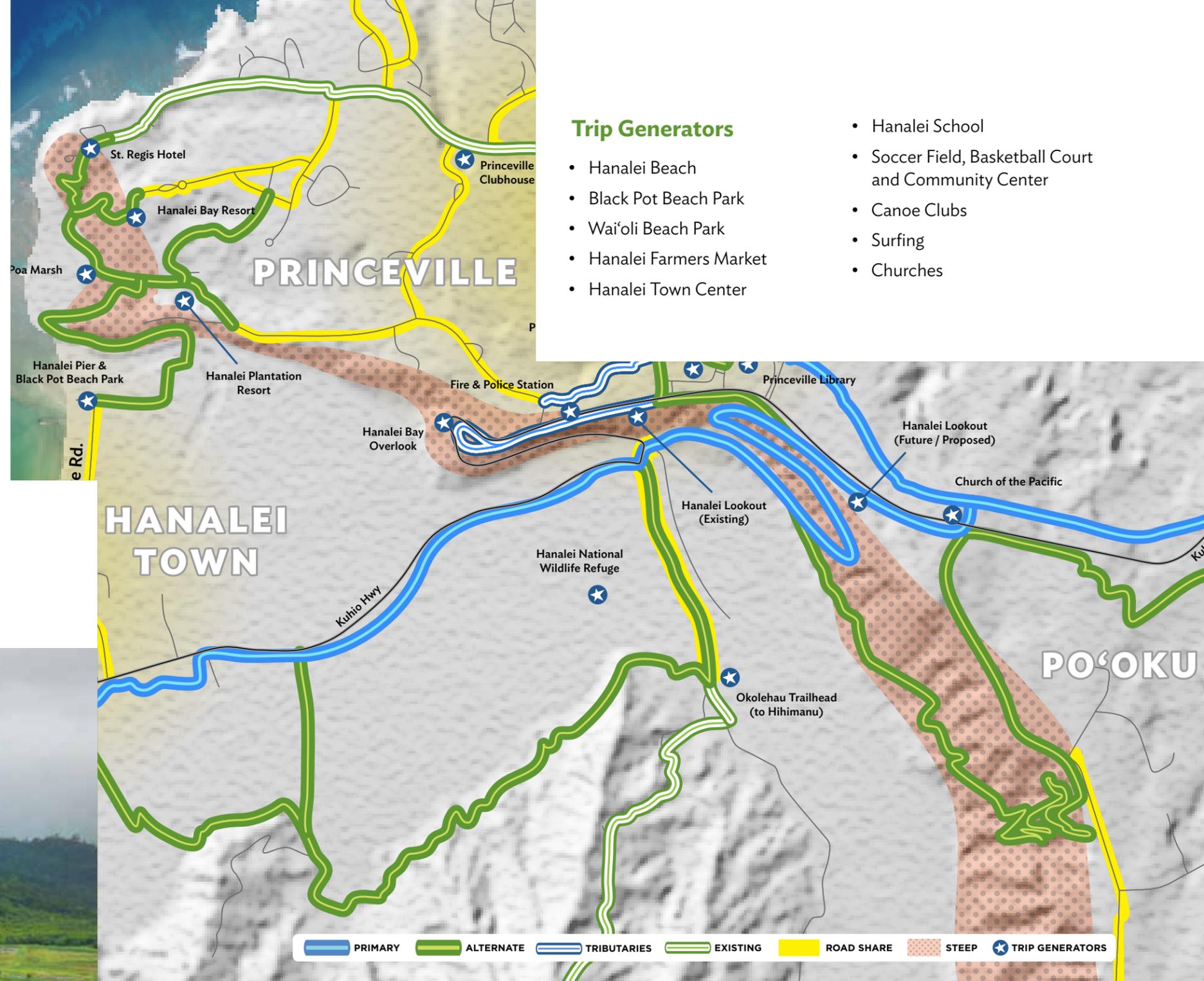
Princeville at Hanalei Community Association (PHCA)

Down the Hill From Princeville to Hanalei

Route Discussion

Princeville is situated on the bluff, a very short distance from Hanalei Bay and the Hanalei town center. Therefore, it seems illogical not to have biking and pedestrian connections between the two communities. Residents and visitors alike would benefit if they had the option to forgo their cars to ride or walk the short distance up and down the hill. Children living in Princeville could easily bike to the beach or Hanalei School. Similarly, Hanalei residents could use the path to access the many businesses, services, and attractions of Princeville.

For some potential routes, the Hanalei River presents the greatest obstacle to be overcome, in other instances there are complex private property issues. The steep slopes of Hanalei Valley pose some limitations and challenges. Nonetheless, there are a number of very promising alternatives – all are worthy of further discussion and study. The ideal end result would be the development of more than one route, perhaps one inland, crossing near the Hanalei Bridge and another nearer to the river mouth.



Trip Generators

- Hanalei Beach
- Black Pot Beach Park
- Wai'oli Beach Park
- Hanalei Farmers Market
- Hanalei Town Center
- Hanalei School
- Soccer Field, Basketball Court and Community Center
- Canoe Clubs
- Surfing
- Churches

Key Landowners (Primary Route)

- U.S. Fish & Wildlife Service
- Princeville Associates
- State of Hawai'i (Department of Transportation)
- Jim Field
- Wilcox 'Ohana
- Wai'oli Corp.

Key Landowners (Secondary Routes Near Hanalei Rivermouth)

- Hanalei Bay Resort
- Hanalei Plantation Resort (Old Club Med) – Hanalei 'Ohana, LLC
- Princeville St. Regis Hotel
- Princeville Associates

Primary Route

The primary suggested route starts inland from Princeville, spanning Kūhiō Highway near the Church of the Pacific. Once mauka of the highway, the path could parallel the road, heading in a westerly direction, to the location where the State DOT has proposed for a relocation of the Hanalei Valley scenic overlook. From this new overlook location, the path would descend down into the valley in a series of long, gradual, and incredibly scenic switchbacks, passing through land which is owned by the USFWS to outlet near the existing Hanalei Bridge. A path route that is integrated with the DOT and USFWS planning could achieve multiple objectives and thereby open up funding from multiple sources.

Primary Connector Route – Hanalei Rim Trail

As is depicted in the route maps, a very scenic and beneficial connector route could also be developed by crossing under Kūhiō Highway with a tunnel near the existing Princeville Shopping Center. Once under the roadway, on the valley side, at or near the top of the bluff, this section of path could run westward to a scenic view point overlooking Hanalei Bay and eastward to connect with the primary route descending to the Hanalei Bridge. This secondary connector would help to provide a direct access to the Princeville Center and could be further networked by providing connectivity to Hanalei

Plantation Road behind the fire station.

Steep slopes will present some significant challenges, especially near the shopping center. One potential option would be to develop this path segment in conjunction with a reconfiguration of the Kūhiō Highway entrance to the shopping center. By shifting the shopping center entrance northward, additional space could be gained for a path to follow along the valley rim. This might also allow for the construction of much needed and long overdue turning lanes into the Princeville Center. It could also



An example of a path tunnel under a roadway

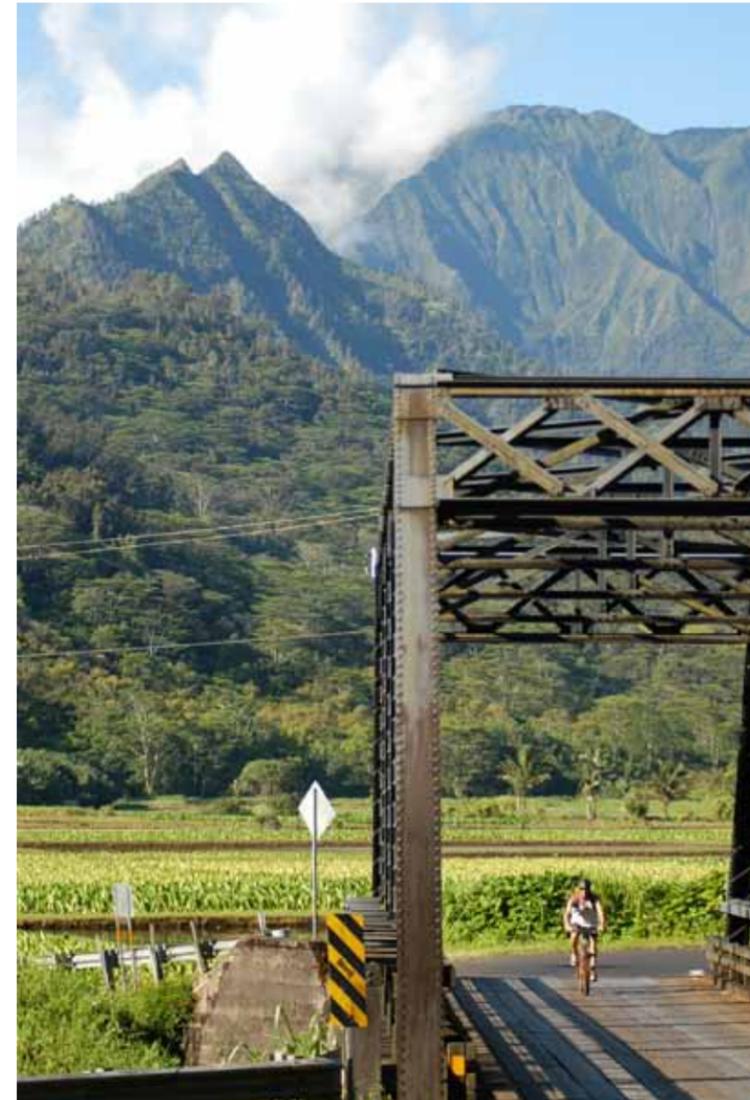
facilitate a reconfiguration or relocation of the current Hanalei Valley overlook (a project which is currently under consideration by the State DOT).

Alternate Inland Route

A possible alternate route could parallel Kapaka Street as it heads mauka, providing a wide buffer as it passes below Po'okū Heiau. Then, at a point where the topography becomes more gradual, the path could veer westward and bisect a small section of the 175-acre privately-owned rim parcel. From the ridgeline, the path would begin a long, gradual, and incredibly scenic descent into Hanalei Valley. The topography of this suggested hill route has been researched to best navigate the steep slopes. This route alternative would be characterized by a park-like entry at the top, followed by a series of switchbacks, and then a long drawn-out traverse down to the suggested crossing on or near the existing Hanalei Bridge. The path would pass through forested sections, punctuated by multiple spectacular view points. The land on this slope, below the rim parcel, is owned by the USFWS. Such an inland route would be longer and therefore more costly to develop.

Crossing the Historic Hanalei Bridge

The Hanalei Bridge is a historic landmark. Preservation of its character is therefore a high priority. It is suggested that cyclists and pedestrians could cross the river using the existing bridge. This could be done with little or no modification to the existing structure. Alternatively, it could be accomplished through the addition of a cantilevered path lane. Yet another alternative could be the construction of a bike bridge, immediately adjacent to, yet completely separate from, the existing vehicular bridge. In either case, the path bridge could be constructed of the same materials and in the same character as the existing bridge so as to take nothing away from the aesthetic nature of either structure. Moreover, by locating a path lane on the mauka side of the existing bridge, it would be less visible from the approaching Hanalei and Princeville bound lanes of traffic. Needless to say, these concepts will merit much more discussion with community members, traffic experts, engineers, and the Hanalei Historic Road Committee. Hopefully a collaborative discussion can ensue...





Skirting the Taro Patches

After crossing the river, the suggested primary route would continue westward toward Hanalei, on the mauka side of the road, adjacent to the taro patches. Taking advantage of existing raised roadways, berms, and embankments wherever possible, the path would follow an incredibly scenic corridor along the lo'i ai. The goal, as always, would be to create as wide a buffer as possible between the road and path, and to use vegetation to screen one from the other. For approximately 1 mile this route would pass alongside the Hanalei National Wildlife Refuge in a parcel which is owned by the State of Hawai'i. Then, about half way between the Hanalei Bridge and Hanalei town there is a transition back onto a large 719-acre parcel which is owned by Princeville Associates. The Princeville parcel, which includes pasture areas, wetlands, and farmed taro patches, continues westward, just mauka of Kūhiō Hwy. Across from the Dolphin Restaurant, it is suggested that the path could go inland behind Postcards Restaurant, still continu-

ing over the Princeville parcel to enter the "backside" of Hanalei town near the Old Hanalei School building. From the shopping center, a path segment could continue westward just inland of the town center, passing through lands that are predominantly owned by the Wilcox 'ohana and the Wai'oli Corp., to provide access to the Hanalei Community Center (Hale Halawai 'Ohana 'o Hanalei), the soccer field, and Hanalei School.

TARO FARMERS AND WILDLIFE CONCERNS

The farmers, who presently lease taro lands from Princeville Associates, the State, and/or the USFWS, and who may be impacted by the North Shore Path, are in some cases descended from ancestors who have farmed in the Hanalei Valley for close to 200 years. Their culture is deep and their relationship with the land is enduring. Much respect for and collaboration with these farming families will be needed to determine the right and best solutions for path alignments. Also of great importance, is

minimizing any negative impacts upon wetland areas and endangered wildlife as the path passes through the sensitive resources of Hanalei.

A solution, which might greatly benefit both the farmers and wildlife, would be a continuous, 4-5 foot high wire fence along the mauka side of the suggested path route. This fence would serve to restrict public access into the Hanalei National Wildlife Refuge, farming areas, and wetland habitat. Such a fence could be interrupted periodically by gates to allow access for farmers and Refuge managers. Another solution would be to open up new taro and Refuge lands by implementing a no-net-loss strategy, through which it might be feasible to more than offset all infringements that are a result of the Path. As with the bridge crossing, hopefully productive, mutually beneficial conversations can take place with the farmers and USFWS Refuge management.

Alternative Mauka Route(s)

After crossing the Hanalei Bridge, this alternative would go inland on Ohiki Road (a.k.a. the "Hanalei Valley Road") for about ¾ of a mile. Then, beyond the historic Ho'opulapula Haraguchi Rice Mill, at the foot of Hihimanu, the route would turn westward and follow along a relatively level contour in a scenic, meandering fashion until it intersects with one, or another, of the existing dirt roads that cut across the 719-acre Princeville parcel behind Hanalei town. This route would then enter the backside of Hanalei somewhere near the town center. Portions of such a route would likely require boardwalks to mitigate wetland impacts. Also, it is likely that such a route would be in addition to (as opposed to instead of) the primary route described.

BENEFITS

- There may be **less encroachment upon taro farms** and wetland areas in the USFWS refuge.
- This route lies **further from Kūhiō Hwy.**
- There is a **very scenic natural setting** along this path corridor.

DISADVANTAGES

- This **less direct route** may discourage frequent commuters.
- It would likely be a **more costly alignment** than the alternative parallel to Kūhiō Highway.
- There are **concerns from USFWS and taro farmers** regarding unauthorized access via such a route and the associated impacts.

Route Possibilities Near the River Mouth

Preliminary research indicates that easements exist, which are associated with the St. Regis Hotel, Hanalei Bay Resort, and the Hanalei Plantation Resort properties, that could be expanded upon to provide public access from Princeville to the beach and Hanalei Bay. Additional easements, skirting inland of the Pu'u Poa Marsh and connecting to the Hanalei River Mouth, if created, could facilitate a quick, more direct connec-

tion between Hanalei and Princeville. To complete the connection a bridge, ferry, or other manner of river crossing would be necessary. Resort guests would benefit as readily as would community members from such a route. The end result could be a significant reduction in the number of cars entering Hanalei.

The route possibilities near the river mouth are very exciting. Collaboration with the County of Kaua'i and/or the Sheehan family will be necessary on the west side of the river where a County effort is currently underway to expand the Black Pot Beach Park. A bike/pedestrian bridge, if created, need not be a huge structure or an eyesore. A bridge inland of the old canoe club could be very beneficial, low-key, and appropriate to the character of Hanalei. It could also prove to be a very effective emergency evacuation route, which in turn, may open doors to potential funding sources. Such route possibilities will require a lot more community dialogue, open minded collaboration among stakeholders, title research, and a thorough feasibility assessment.



A scow crossing one of the rivers on the North Shore. Credit Kaua'i Museum Archives



In & Around Hanalei

Route Discussion

As mentioned earlier, a continuation of the primary entry route behind Hanalei Center could be extended westward to provide access to the Hanalei Community Center, the soccer field, and Hanalei School. Such a route would predominantly impact lands owned by the Wilcox ‘ohana and Wai`oli Corp.

In addition, existing roadways throughout Hanalei could be reconfigured to make them more bike and pedestrian friendly. Sidewalks could be extended along Kūhiō Highway to the Trader Building in order to make a “complete street” through the center of town. Some of the existing 2-way roads between Kūhiō Hwy and Weke Road could be reconfigured into one-way streets to allow for pathways to occur within the existing County Right-of-Ways. Weke Road could remain exactly as it is today, and a share-the-road policy could be implemented. Bike racks could be located throughout town, at parks, shops, and at the beaches. Integration with the Kaua‘i Bus would complete the transit solution. The rural character of Hanalei could be improved, not diminished, by accommodating more biking and walking and thereby providing ecologically attractive alternatives to the current, nearly exclusive dependence upon cars.

Wainiha & Hā‘ena

Route Discussion

Due to the steep topography between Waikoko and Wainiha, the feasibility of extending trails beyond Hanalei is not addressed in this report. In time, a route to Hā‘ena may be addressed through a separate planning process.

SUPPORTIVE COUNTY, STATE, & FEDERAL LEGISLATION

For a project like the North Shore Path to succeed, government policy, legislation, and political leadership must support it. This section briefly summarizes the current political landscape supporting the viability of multi-use paths here on Kauaʻi. As you will see, there are a number of current planning and policy initiatives guiding us toward the desired outcome...

County of Kauaʻi

Kauaʻi County General Plan (2000)

By Charter, the General Plan governs the future development of the County and is adopted by ordinance. It also guides the regional development plan updates and special area plans, such as the Kīlauea Town Plan. The existing North Shore Development Plan was adopted in 1980. The update of this Plan (TBA) will be an opportunity to address multimodal transportation issues on the North Shore.

The 2000 General Plan update envisions “communities which care for their land and waters, leading the way with best management practices in the development of roads and other public facilities and in land development and public regulation.” General Plan policy 7.3.2 states: “Support funding to develop Kauaʻi’s bikeway system to provide for alternative means of transportation, recreation, and visitor activities.”

THE 2000 KAUAʻI GENERAL PLAN UPDATE CAN BE ACCESSED ONLINE AT:

<http://www.Kauai.gov/Government/Departments/PlanningDepartment/TheKauaiGeneralPlan/GeneralPlanOrdinance/tabid/131/Default.asp>



Growing Kauaʻi Responsibly

In his inauguration speech in December of 2010, Mayor Bernard Carvalho presented his leadership vision for Kauaʻi – he calls it Holo Holo 2020...

“Holo Holo 2020 calls for all organizations, businesses, residents, and visitors on Kauaʻi to be part of creating an island that is sustainable, values the native culture, has a thriving and healthy economy, cares for all – keiki to kupuna, and has a responsible and user-friendly local government.”

The Mayor’s vision goes on to identify 38-specific projects or objectives, which, once accomplished, will help to transform his progressive vision into our island’s sustainable reality. Among these, the following objectives are closely aligned with those of the North Shore Path:

- **Increase Alternative Modes of Transportation** (Kauaʻi Bus, Shuttle Services, & Bike/Walk Paths)
- Create **Safe Routes to School** and **Walkable Communities**
- Implement **Complete Streets Island-Wide**
- Implement a **Kēʻē Beach Shuttle Service**
- **Expand Hanalei Black Pot** Beach Park
- **Extend the Ke Ala Hele Makalae Coastal Trail** for 15 Connected Miles
- Introduce **Additional Hybrid Buses** with Increased Ridership
- **Expand Bus Service** Routes and Hours of Operation



Holo Holo 2020
Growing Kauaʻi responsibly.

Kaua'i Multimodal Land Transportation Plan

Multimodal transportation planning refers to decision making that considers various modes of transport (i.e. walking, cycling, and public transit in addition to automobiles) and the connections among modes, so that each mode can fulfill its optimal role in an overall transportation system. Starting with a number of public/community workshops in August of 2011, the County of Kaua'i is currently preparing a Multimodal Land Transportation Plan with funding from the U.S. Department of Transportation. This planning process, which is guided by the Kaua'i General Plan, is closely coordinated with the State DOT Land Transportation Plan for Kaua'i (see below). The Kaua'i multimodal planning process is scheduled to culminate in May of 2012 with the publication of a draft plan/report for consideration and adoption by the County. This concurrent planning process presents a fantastic opportunity for the North Shore Path to be integrated into the long-term planning policies of the island. For more information and to participate in the planning process, go to: <http://moveKauai.net>.

Kaua'i Complete Streets Resolution

Complete Streets are roadways and transportation facilities designed and operated to enable safe, attractive, and comfortable access for all users of all ages and abilities, including pedestrians, bicyclists, motorists, and public transport users. On September 15, 2010 the Kaua'i County Council unanimously passed a resolution establishing a Complete Streets Policy for the County of Kaua'i, which resolves that "The County of Kaua'i plan for, design, and construct new County transportation improvements in accordance with Complete Streets principles in order to safely accommodate travel by pedestrians, bicyclists, public transit, and motorized vehicles, with special priority given to pedestrian travel in town centers and other densely populated areas."

State Government

Bike Plan Hawai'i

Bike Plan Hawai'i is a policy document whose objective is to integrate bicycling into the statewide transportation system. The plan outlines objectives for the State to accommodate and promote bicycling. It recommends a combination of more biking paths and infrastructure, coupled with policies and programs to build a safe and successful "network."

A Kauai North Shore Path Network of approximately 12.2 miles is identified in Bike Plan Hawai'i. Some of

the proposed routes within this NSPAR are similar if not synonymous with those laid out in Bike Plan Hawai'i. These concurrencies establish important and valuable policy directives for the North Shore Path at the State level.

An updated version of Bike Plan Hawai'i may be accessed online and downloaded at: <http://hawaii.gov/dot/highways/Bike/Bike%20Plan>.



State Act 233 (11)

Enacted by the State Legislature and signed into law by Governor Abercrombie on July 12, 2011, the purpose of Act 233 is to "promote smart growth and sustainability in the State by requiring the office of planning to develop a plan to establish a statewide system of greenways and trails." The timing of this Act,

relative to the North Shore Path planning effort, is very fortunate and synchronistic. The community and county are encouraged to seize upon this opportunity to open doorways for state support – both administrative and financial.

Statewide Long-Range Land Transportation Plan (SLRLTP)

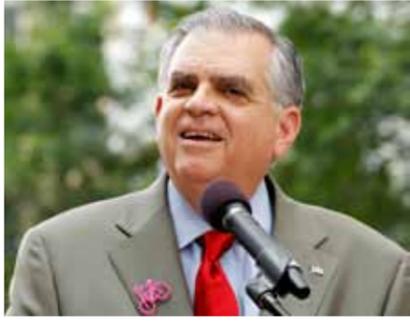
The Hawai'i DOT is in the process of developing a Statewide Long-Range Land Transportation Plan for the entire state and a Regional Long-Range Land Transportation Plan (RLRLTP) for the island of Kaua'i.

Once again, North Shore communities should seize upon these parallel planning processes to make their opinions heard regarding the North Shore Path.

DOT Statewide Pedestrian Master Plan

The process of preparing a Statewide Pedestrian Master Plan (SWPMP) is also underway. The SWPMP, which is aimed at improving pedestrian facilities, and thereby decreasing pedestrian injuries and fatali-

ties, will identify the most critical needs of the state's highway system, and will provide guidance for future projects. The Draft Plan lists Hanalei as an "Area of Concern."



Federal Government

The following statements, issued on March 15th, 2010 by the U.S. Department of Transportation, paint a clear picture of the federal government's policy on projects such as the North Shore Path.

“The United States Department of Transportation (DOT) is providing this Policy Statement to reflect the Department's support for the development of fully integrated active transportation networks. The establishment of well-connected walking and bicycling networks is an important component for livable communities, and their design should be a part of Federal-aid project developments. Walking and bicycling foster safer, more livable, family-friendly communities; promote physical activity and health; and reduce vehicle emissions and fuel use. Legislation and regulations exist that require inclusion of bicycle and pedestrian policies and projects into transportation plans and project development. Accordingly, transportation agencies should plan, fund, and implement improvements to their walking and bicycling networks, including linkages to transit. In addition, DOT encourages transportation agencies to go beyond the minimum requirements, and proactively provide convenient, safe, and context-sensitive facilities that foster increased use by bicyclists and pedestrians of all ages and abilities, and utilize universal design characteristics when appropriate. Transportation programs and facilities should accommodate people of all ages and abilities, including people too young to drive, people who cannot drive, and people who choose not to drive.”

Ray LaHood, United States Secretary of Transportation

By seeking to carry out the policy objectives expressed by the U.S. DOT, projects like the North Shore Path will become eligible for Federal Highway Administration (FHWA) funds.

REGULATORY CONSIDERATIONS

The regulatory framework for the creation of a network of multi-use paths is much the same as would be required for any proposed new land use (i.e. for the construction of roadways, bridges, or development of any kind). Therefore, cultural, archaeological, and environmental review processes may be required in order to comply with the Hawai'i State Environmental Review process (as governed by Chapter 343 HRS) and the National Environmental Policy Act (NEPA).

Necessary Permits and Approvals

At this juncture, without project-specific details about the North Shore Path, it is premature to list all of the regulatory and permitting requirements that will need to be addressed. Nevertheless, following is an overview of the permitting requirements that will likely be associated with the project.

- **National Environmental Policy Act (NEPA)** - Compliance
- **Chapter 343 HRS (Hawaii Revised Statutes)** - Re: Environmental Impacts
- **Clean Water Act, Section 404** - Compliance with the Clean Water Act will be triggered by any work proposed within streams, rivers, wetlands, or other jurisdictional waters of the United States. The Act is administered by the Department of the Army, Engineering Division.
- **Historic & Cultural Sites Review** - State DLNR, Historic Preservation Division (SHPD) Section 106
- **State DLNR, Stream Channel Alteration Permits (SCAP)** - If work in streams or rivers is required
- **Section 401 Water Quality Certification** - State Department of Health (DOH). If work in streams or other waters of the U.S. is required
- **National Pollutant Discharge Elimination System (NPDES) Permit(s)** - State DOH
- **Hawai'i Coast Zone Management (CZM) Program** - Compliance with CZM & Federal Consistency
- **County of Kaua'i, Planning Department** - Compliance with the Comprehensive Zoning Ordinance (CZO) (a.k.a. Chapter 8 of the Kaua'i County Code), including Special Area Plans and the North Shore Development Plan (Chapter 10 of the Kaua'i County Code)
- **County Department of Public Works (DPW)** - For Grubbing, Grading, & Stockpiling Permits

CONSTRUCTION CONSIDERATIONS

This section provides a brief overview of construction, engineering, and maintenance matters.

Path Surfaces

Path segments may be constructed of any number of surface materials. Further, depending upon their function, classification, location, and other influencing factors, it is quite likely that various segments of a North Shore Path may be constructed of different materials. Following is a brief overview of path surfaces as well as their associated benefits and costs:

CONCRETE



Concrete paths are smooth and highly durable. They provide superior safety, and therefore accommodate the widest range of users. Construction costs are considerably higher when compared to other path surface types; but a significant reduction in long-term maintenance typically justifies the larger initial investment. As part of a multimodal transportation system concrete paths will likely be the preferred alternative. They are also preferred on sloped areas, mainly due to their durability and safety. Ke Ala

Hele Makalae on the East Side is predominantly constructed out of concrete.

PERVIOUS CONCRETE

This is a special type of concrete with a high porosity that allows for water to pass directly through the concrete, which reduces runoff and allows for groundwater recharge. The option of pervious concrete should be explored as an alternative to traditional concrete.

ASPHALT CEMENT



This is the black tar surface that is typical of most roadway construction. Asphalt provides a hard, safe, smooth surface much like concrete and is less costly to construct. However, it is also significantly more porous and therefore less durable when compared to concrete, especially in wet environmental conditions (as are characteristic on the North Shore). A cost/benefit analysis of traditional concrete, pervious concrete, and asphalt should be conducted to determine the best long-term surface solution.

CRUSHED & COMPACTED CORAL OR GRAVEL



These paths are constructed by compacting a layer of gravel over a graded dirt substrate. As a result, they have a semi-loose character. For gravel paths, it is imperative that the aggregate used be relatively fine, since larger and/or rounded stones do not “bind” well, making for loose surfaces with potentially difficult and dangerous riding and walking conditions. Crushed coral is preferred over gravel because limestone has natural cement properties that will help to bind the compacted surface. Generally speaking, crushed coral or gravel surfaces are only suitable for bikes with wide tires (i.e. mountain bikes).

The primary advantages of crushed coral and gravel trails are that they have a more natural appearance which blends better into the environment. They are also significantly less expensive to construct than are the various forms of concrete or asphalt. The primary disadvantages are that they erode quickly in wet conditions, and allow for weeds to grow

through their surface (which in turn promotes the recurrent use of toxic chemicals for maintenance). They also do not accommodate narrow-tire bicycles or users with disabilities very well.

DIRT PATHS & NATURAL SURFACES



In most cases, natural dirt paths may only be appropriate for hiking and/or mountain biking. Due to safety and access concerns, they are not appropriate for the primary routes of a multi-use path system, which aims to provide usability to as many people as possible. Nevertheless, certain elements of a North Shore Path network may well benefit from less formal, natural trails, and these types of paths should not be ruled out, but rather encouraged. Current examples of dirt trails include the walking paths down to Kauapea and ‘Anini Beach.

BOARDWALKS



Raised boardwalks, may prove to be the most appropriate surface solution for certain wetland and steep-sloped areas on the North Shore. In wetland areas, non-invasive boardwalk construction would serve to keep natural ecosystems intact while allowing path users to enjoy a foray into these unique and important ecosystems.



Volunteers maintain the path near Kealia. Photo: Kaua'i Path

Maintenance Considerations

To determine the most appropriate types of path surfaces for a North Shore Path, a cost/benefit analysis of the initial construction costs vs. associated ongoing maintenance expenses must be carried out. As outlined above, many of the less expensive and more natural

surface alternatives will likely result in degraded surfaces in wet conditions, higher on-going maintenance demands, and recurrent negative environmental impacts. The right surface solutions should be guided by the objectives of constructing paths which provide

the highest degree of safety and accessibility with the most beneficial cost profile over a long-term time horizon (50+ years), and which result in the least impact upon natural resources.

Americans With Disabilities Act (ADA)

To the greatest extent possible, the North Shore Path effort seeks to create a network of multi-use paths which will provide access to all members of the public, including those with disabilities. The Americans With Disabilities Act (ADA) of 1990 provides guidelines for developing accessible paths and facilities. As of this writing, the United States Access Board, a federal agency responsible for accessible design, is in the pro-

cess of developing accessibility guidelines for multi-use paths. The guidelines will include technical provisions for constructing new paths and adapting existing paths to be in compliance. Hopefully these guidelines will be available very soon in order to guide the North Shore Path planning and implementation processes. More information about accessibility can be found online at: <http://www.access-board.gov/>

Mayor Bernard Carvalho has formed the Mayor's Advisory Committee for Equal Access (MACFEA). For more information you may contact Christina Pilkington, County of Kaua'i ADA Coordinator, or visit the Mayor's website at:

<http://www.Kauai.gov/Government/OfficeOfTheMayor/ADAInformation/tabid/151/Default.aspx>

Network! Network! Network!

A guiding principle of the North Shore Path planning effort is to create an interconnecting network of paths. A comprehensive path network would result in multiple options and linkages between various destinations. This design objective will therefore encourage the exploration and development of more than one route between any two points. For example, a path crossing near the mouth of the Hanalei River, when combined with a crossing further mauka at the existing Hanalei Bridge, would offer path users the opportunity to complete a circuit from Princeville to Hanalei and back again (via an alternate route). Not only does this enhance the trail experience, it also provides more convenience, functionality, and connectivity.

A path network, when integrated into a multimodal transportation system, becomes an even more powerful and transformative solution. Expanding upon the Princeville to Hanalei example, one could bike or walk down to Hanalei, and then catch a bus (outfitted with bike racks) back up the hill to Princeville. Such a multimodal network would support the use and enjoyment of the path by all generations and fitness levels.

Bottom Line = Networks Work! One only needs to look to the Internet for proof!

Every Path Connection Makes a Difference

Building upon the guiding principle of creating a network, it is important to emphasize that every path connection that creates a safe and separate way for pedestrians and cyclists to move about is of potentially great value. Therefore, as the North Shore Path planning effort moves forward, it will be important to consider all possibilities no matter how short, how long, or how remote they may initially seem. Ideas and public input are welcomed, and private landowners are encouraged to offer linkages via their properties wherever possible.

Technical & Engineering Considerations

For an excellent, in-depth resource regarding the technical design considerations for Multi-use Paths, please go to the Florida Bicycle Facilities Planning and Design Handbook (2000) available online at:

http://www.dot.state.fl.us/safety/ped_bike/ped_bike_standards.htm#Florida%20Bike%20Handbook



Volunteers network at Kamalani. Photo: Kaua'i Path

COST CONSIDERATIONS

The questions most often asked about the North Shore Path are:

“How much will it cost?” and “Where will all of the money come from?”

At this stage, without defined path routes, there are no ready answers to these questions. If a North Shore Path network is eventually completed as envisioned herein, it would likely represent a capital investment of a magnitude of ten to twenty million dollars. However, if properly developed, the payback, economic stimuli, and public benefits would be realized in perpetuity and the up-front costs could be amortized out over a long time. At this point, since absolute dollar amounts are not easily assessed, this planning discussion is focused on relative cost and saving considerations.

By and large, widespread research studies substantiate that multi-use paths are sensible economic investments for car-dominated communities like ours. In the U.S., transportation ranks as the second largest, single household expenditure at 18.9% of annual income. Our car dependency is very costly on an individual level, as well as for our communities and the environment. The research demonstrates that there are widespread financial benefits to be realized in reapportioning our current transportation dollars into alternative modes of transport.

The next two sections of the NSPAR provide a framework for evaluating cost considerations and potential funding sources.

Planning & Design

Initially, the costs of implementing a North Shore Path will be in the realm of planning and design.

Costs will likely include:

- Planning & Conceptual Design
- Feasibility Assessment(s)
- Engineering Assessment(s)
- Environmental and Cultural Impact Evaluations
- Community Outreach
- Political Outreach
- Legal Services
- Regulatory & Zoning Compliance

It is estimated that the planning and design process may take as little as 2 years for some phases and as long as 5-10 years for others. It is difficult to estimate, but planning costs could easily exceed \$2.0M for the entire North Shore Path network.

Construction Costs

Construction costs will be impacted by a number of variables, as yet to be determined, including (but not limited to):

- Topography
- Path surface material(s)
- Re-use of existing infrastructure
- Engineering requirements
- Environmental compliance requirements

As a result, some path segments will cost a fraction of what others cost. The most costly elements will be structures such as bridges, and constructing routes that traverse steep slopes. As project planning progresses, costs will need to be evaluated in much greater detail.



Tree Planting at Lydgate. Photo: Kaua'i Path

On-Going Maintenance

An important consideration, beyond initial construction costs, are the ongoing costs of maintaining path resources. This subject is discussed in greater detail in the “Next Steps” Section of this Report.

FUNDING SOURCES & MECHANISMS

Federal Funding

Predominant funding for the North Shore Path will most likely come from the United States, Department of Transportation, Federal Highway Administration (FHWA). The FHWA's Transportation Enhancement (TE) program offers funding opportunities to help expand transportation choices and enhance the transportation experience through 12 eligible TE activities related to surface transportation. Eligible activities include pedestrian and bicycle infrastructure and safety programs, scenic and historic highway programs, landscaping and scenic beautification, historic preservation, and environmental mitigation. TE funds typically require an "80/20 Match" with 20% of project funding being contributed by local sources. Often times, as has largely been the case for Ke Ala Hele Makalae, a "soft match" of funds is created when land for multi-use paths is donated by private landowners, wherein the value of the donated land satisfies the 20% funding criteria. In this way, very little funding may be required to come from our State or County budgets.

TIGER GRANTS

Transportation Investment Generating Economic Recovery (TIGER) Grants provide unique opportunities for the U.S. Department of Transportation (DOT) to invest in projects like the North Shore Path. Grants can be for planning and/or construction activities. The TIGER program enables the DOT to select projects with exceptional benefits, and to explore ways to deliver projects faster, in order to make investments in infrastructure that make communities more livable and sustainable.

For more information go to:

<http://www.dot.gov/tiger/index.html>.

State Funding

Through collaborative planning efforts, political direction, and internal agenda-setting, the Hawai'i Department of Transportation (DOT) plays a critical role in procuring project funding from the FHWA and/or through State budget. The Hawai'i DOT sets statewide priorities, influences project objectives, and directs project expenditures. Once FHWA funds are awarded, the Hawai'i DOT serves as the conduit for the intake, administration, and expenditure of allocated funds. The North Shore Path project, like every transportation objective, will need to compete with other projects around the State in order to get its "piece of the pie" (a percentage of the available funding in any given fiscal cycle).

STATEWIDE TRANSPORTATION IMPROVEMENT PLAN (STIP)

Getting on the STIP is a critical step for any project like the North Shore Path. In order for a project to receive funding through the Hawai'i DOT, it must be included in the STIP. The Hawai'i DOT updates the STIP regularly.

County Funding

Construction funding for the North Shore Path is not likely to originate at the County level. Under the current budget, and without some manner of supplemental local taxation, the County does not have a revenue stream sufficient to construct a resource like the North Shore Path. Not to worry - - as stated earlier, project funding is most likely to start at the Federal level, then pass through the State, to end up in local hands. This is exactly what is happening for the development of Ke Ala Hele Makalae on the East Side of Kaua'i. Thus far, the County of Kaua'i has

been able to develop the East Side path with little or no budget expenditures toward actual construction costs (albeit significant County resources are being allocated toward planning & administration). The County has been working diligently and effectively to qualify for "soft matches" under the FHWA 80/20 funding criteria.

What is needed (and what is already happening) at the County level is political and administrative support for a project like the North Shore Path. It will be essential for the County to take an active and collaborative role in order to move such a project forward. The County will need to participate in the planning and community input processes, and then "sponsor" the North Shore Path at both State and Federal levels in order to help to secure funding. Eventually the County would be involved in the zoning, design, environmental, procurement, and construction processes. Bearing this in mind, local communities are encouraged to communicate their opinions about the North Shore Path to their elected officials and County department heads. The voice of many will beget the change that is desired.

MUNICIPAL BONDS

A municipal bond is a debt instrument, created by a municipality (like the County of Kaua'i) to raise money for a project. Like any debt instrument, the borrower (the County in the above-example) would have an obligation to amortize (pay back) the debt owed to the lenders. Payoff for a bond (like a mortgage) is typically tied to a stated period of time (a number of years often related to the life expectancy of the project), and includes both principal and interest. If supported by the tax-paying and voting residents of Kaua'i, the County could potentially raise construction funding for the North Shore Path through the issuance of a municipal

bond and then spread the cost out over an extended number of years.

Private Sector Funds

Private monies raised through grant programs, non-profit organizations, individual donors, and community efforts are a very important source of funds, especially at this critical "start-up" phase of the North Shore Path. To advance the project beyond the NSPAR, a primary goal is to raise more money in order to pursue the objectives set forth in the "Next Steps" section. Community members in support of the Path are encouraged to get involved, play an active role, make a contribution, and volunteer some time in order to advance the goals of the North Shore Path. The more community participation, the better.

"Shovel Ready" = Funding Eligibility

A project is considered "shovel ready" when it is at a stage when laborers may be immediately employed to commence work. The term has been used of late, by the Obama administration, to identify projects which are candidates for economic stimulus spending. The idea being that funding awarded to shovel ready projects will have a more immediate and widespread economic impact than would money spent on projects which still require a great deal of time in planning and design. The sooner that the North Shore Path can become shovel ready, the greater the likelihood of attracting construction funding. This is also to say that nothing will happen until a solid, widely accepted plan is in place.



OWNERSHIP, STEWARDSHIP, & MAINTENANCE

As with most of our local roadways, the most appropriate and therefore likely owner of a multi-use path system is the County of Kaua'i (and/or possibly the State). By placing ownership in the hands of local government, the path/park resources will be held and managed in perpetuity for the public benefit. As simple as this may sound, there are some challenges and opportunities that need to be considered before obligating the County with additional management responsibilities.

Land Donations & Matching Funds

As discussed earlier, when lands are donated to the County, it opens the door for matching funds through the Federal Highways Administration. This is the most

significant near-term benefit of County ownership of path resources.

Funds for Ongoing Maintenance

While donated paths and federal matching funds do not, in and of themselves, burden the County with a new financial obligation, ongoing maintenance of path resources will. The County will need to allocate a significant portion of its budget to care for existing paths and maintain those that are to be developed in the years ahead. Additional revenues may be generated by park/path fees, supplemental taxation, bicycle licenses, and other such measures. The underlying goal should be to reduce (not increase) the overall transportation costs for County taxpayers. Since most

Americans currently spend such a disproportionate percentage of their income on automobile travel, and since paths will stimulate economic development, the revenue/cost equation is a promising one. The County of Kaua'i and the North Shore Path effort are advised to research how other municipalities around the nation are addressing long-term maintenance and budgetary issues, and then implement sound fiscal practices to ensure that, once created, path resources are properly maintained.



Adopt-A-Park Program

The County of Kaua'i's existing "Adopt-A-Park" program is a great way for communities to assist the County by taking on stewardship responsibilities for community resources like the North Shore Path. Originated in 2005, the Adopt-A-Park program provides community members with tools and supplies to help care for various parks throughout the island. Program volunteers receive an official certificate of adoption, and an adoption sign is posted at the park site after 60 reported hours of service. Anyone can join the program including individuals, families, organizations, businesses, and schools. Volunteers can help in many ways. They can pick up litter, remove graffiti, sweep pathways, pull weeds, plant vegetation, or engage in other approved projects. The Friends of Kamalani & Lydgate Park and Kaua'i Path's "Second Saturday Sweeps" provide shining examples of successful adopt-a-park programs.

FOR MORE INFORMATION GO TO:

Adopt-A-Park:

<http://www.Kauai.gov/Government/Departments/ParksRecreation/AdoptAParkProgram/tabid/327/Default.aspx>

Kaua'i Path, Second Saturday Sweeps:

<http://www.Kauaipath.org/get-involved>

Friends of Kamalani:

<http://www.kamalani.org/>



Private/Public Partnerships

In order for an ambitious project like the North Shore Path to succeed, it needs support from all sectors of our community.

Government leaders, kupuna, keiki, private landowners, funding sources, politicians, and special interest groups will need to work together to express and develop a unified vision. Public participation and collaborative planning will manifest amazing results. Kaua'i Path is well positioned, organizationally, to facilitate in the process of building such collaboration, and it is largely through the efforts of the Kaua'i Path Board of Directors that this Report has been made possible.

Community Organizations

The following community organizations will be called upon for their further input and to aid in community outreach so that more collaboration can take place in the continuing planning process for the North Shore Path:

- **Kaua'i Path** – <http://www.Kauaipath.org>
- **Kīlauea Neighborhood Association (KNA)** – <http://kna-Kauai.org>
- **Princeville at Hanalei Community Association (PHCA)** – <http://www.pcaonline.org>
- **Hanalei-to-Hā'ena Community Association (HHCA)** – <http://www.hhcaKauai.org>
- **State DOFAW, Na Ala Hele Trails Program** – <http://hawaiiitrails.ehawaii.gov>
- **Hanalei Historic Road(s) Committee**
- **Hanalei Watershed Hui** – <http://www.hanaleiwatershedhui.org/index.htm>
- **Kaua'i Taro Growers Association**
- **Get Fit Kaua'i** – <http://www.getfitKauai.com/>
- **Hawai'i Islands Land Trust (HILT)** – <http://www.hilt.org>



NEXT STEPS

The North Shore Path is an ambitious vision. There is a great deal of important work to do. Following is a brief summary of what is likely to come next in the planning process...

Community Meetings

There will be a number of scheduled and publicized meetings on the North Shore to discuss the project vision and encourage community input on all important issues. Meetings will occur regularly throughout the 2012 calendar year. Community members who choose to register on the North Shore Path website will be kept up-to-date on planning issues and will be provided with additional opportunities to share their input.

Cultural Impact Assessment & Kupuna Interviews

An important next step will be to encourage and engage more dialogue with our North Shore kupuna. The goals are to seek their mana'o about the ancient alaloa, their insights about the old river crossings, and encourage their guidance for the project. While some kupuna have participated thus far, more input is vital, and is a top priority.

Fundraising

In order to keep the planning process moving forward, additional funding for the North Shore Path is absolutely critical. This Report will be used as an outreach and fundraising tool. Significant funds are needed to address the many administrative, environmental, cultural, planning, and legal matters that will come up. Community members are encouraged to volunteer and join the effort.

The stated North Shore Path funding goal is to raise \$75,000 (or more) in 2012.

Donations may be made online at:

www.NSpath.Kauaistyle.com

Engaging Volunteers & Active Community Participation

The North Shore Path project will not happen without the efforts of many people. It is a community project which needs community participation. This Report provides a vision and some valuable information about alternatives for the North Shore Path. It is a call to action for people to step up, get involved, be informed, share their voice, volunteer their time, and tell their friends. The Path will only come into existence if people focus their attention upon it.

Project Administration

While community volunteerism is a vital facet of the North Shore Path, the daily cumulative demands of the project will require a dedicated paid staff position. Funding for such a staff position is a near-term goal in 2012.

Meetings & Connections

Many important meetings will take place with local stakeholder groups, government leaders, land owners, funding sources, etc.

North Shore Path Website

The website will be updated regularly to keep community members and all interested parties informed as the planning effort proceeds.

Political Support

A primary object will be to solicit active participation, input and support at all levels of government as early as possible in the planning effort for the North Shore Path.

Feasibility Assessments

A more extensive analysis of impacts to natural resources, archaeological resources, scenic vistas, wetlands, and other community assets will be carried out as path routes are studied and community input is gathered. Extensive engineering, cost, and construction analysis will also become necessary.

Input and ideas gathered through these "Next Steps" will be used to advance a feasible and unified vision for the North Shore Path. Once community support is solidified, path phases can begin to move forward toward funding and implementation.



SUMMARY & CONCLUSION

For all who have taken the time to read this Report – we thank you! We hope that it has informed, engaged, and inspired you. Whether you are generally in support of the project, or if you have some concerns about it, we want to hear your input. Please check out the website, tell a friend, ask some questions, and get involved.

Is this really an “idea whose time has come?” Please tell us what you think...

Albert Einstein once said “You cannot solve a problem with the same mind that created it.” In other words, to make a shift away from “problems” or negative circumstances, we must re-think our relationship and understanding of the world. The North Shore Path offers a unique opportunity to reshape our communities, move away from our car-dominated society, and move into a healthier, more environmentally responsible future.

Consider for a moment, the alternatives – if we say “NO” to the North Shore Path, what are we saying “YES” to?

As we conclude, we want to once again express the goodwill with which the North Shore Path effort is being pursued. We ask that our communities carry the planning process forward in the Kaua’i spirit of ALOHA...

- A Akahai** – Kindness, expressed with tenderness.
- L Lōkahi** – Unity, expressed with harmony.
- O `Olu`olu** – Agreeable, expressed with pleasantness.
- H Ha`aha`a** – Humility, expressed with modesty.
- A Ahonui** – Patience, expressed with perseverance.

GLOSSARY OF TERMS

Alternative Routes - routes, which through additional study, may prove to be the most viable path (as opposed to a primary suggested route). Alternative routes may be developed in addition to, or instead of suggested primary routes.

Complete Streets - (sometimes livable streets) are roadways designed and operated to enable safe, attractive, and comfortable access and travel for all users, including pedestrians, bicyclists, motorists and public transport users of all ages and abilities.

Greenway Trail - from the green in green belt and the way in parkway, implying a recreational or bike/pedestrian pathway with emphasis on an experience in nature. Some greenways include community gardens as well as typical park-style landscaping of trees and shrubs.

Kauai Path, Inc. - a non-profit organization which advocates for better biking and walking facilities and public access island-wide (www.kauaipath.org).

Linear Park - A linear park is a park that is much longer than it is wide, often formed as a part of a contiguous trail plan.

Mixed Use Development - the use buildings and/or neighborhood for more than one zoning purpose. When jobs, housing, and commercial activities are located close together, a community's transportation options increase. Often located in existing urban areas or as part of a new town center, mixed-use development provides a range of commercial and residential unit sizes and options.

Multi-Modal Transportation Planning - refers to land use and development planning that considers various modes (walking, cycling, automobile, public transit, etc.) and connections among modes so each can fill its optimal role in the overall transportation and development system.

Multi-Use Path - a type of trail designed to be part of a multi-modal transportation system, by providing off-road routes for a variety of users. The primary users of multi-use paths are bicyclists and pedestrians, including pedestrians using mobility devices such as manual or motorized wheelchairs. While they may coincidentally provide a recreational experience, multi-use paths differ from other types of trails due to their transportation focus by serving as a supplement to on-road bike lanes, shared roadways, bike boulevards and paved roadway shoulders. They may extend or complement a roadway network. (See also Shared-Use Path).

Pedestrian - a person traveling on foot, whether walking or running. In some communities, those traveling using roller skates or skateboards are also considered to be pedestrians. In modern times, the term mostly refers to someone walking on a road or footpath.

Pre-Contact Period - refers to that time in Hawaiian history prior to western contact, i.e. before Captain James Cook and his crew came to the Hawaiian Islands on January 18, 1778.

Primary Path Route - The suggested path of greatest benefit and least resistance between Kilauea, Princeville and Hanalei. See also Alternative Route(s).

Public Transit (a.k.a. Public Transportation) - a shared passenger transportation service which is available for use by the general public, as distinct from modes such as taxicab, car pooling or hired buses which are not shared by strangers without private arrangement.

Shared-Use Path - synonymous with Multi-Use Path.

Smart Growth - is an urban planning and transportation theory that concentrates growth in compact, walkable, urban centers to avoid sprawl and advocates compact, transit-oriented, walkable, bicycle-friendly land use, including neighborhood schools, complete streets, and mixed-use development with a range of housing choices.

TEA-21 Enhancement Funds - flexible funding from the Federal Highway Administration (FHWA) that may be used by States and localities for projects on any Federal-aid highway, including multi-use paths.

Right-of-Way (ROW) - is a strip of land that is granted, through an easement or other mechanism, for transportation purposes, such as for a trail or highway.

Road Share - describes a situation when cyclists and automobiles share a roadway corridor. Through property signage and safety improvements road shares have proven to be very effective, low-cost ways to enhance biking opportunities.

Secondary or Tributary Route - Route(s) which feed into Primary and/or Alternative Route(s). It is helpful to think of these secondary paths as being analogous to the tributaries of a river. They are not the main spine of the suggested network, but will provide important, convenient connectivity to neighborhoods, schools, parks and community resources.

Transit Oriented Development - is a mixed-use residential or commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership. A TOD neighborhood typically has a center with a transit station or bus stop surrounded by relatively high-density development with progressively lower-density development spreading outward from the center. TODs generally are located within a radius of one-half mile from a transit stop, as this is considered to be an appropriate scale for pedestrians.

Trip Generator - a location where a trip begins or ends. A point of origin or a destination.

Wetland - an area of land whose soil is saturated with water either permanently or seasonally. Wetlands are categorized by their characteristic vegetation, which is adapted to unique soil conditions. The water found in wetlands can be saltwater, freshwater, or brackish. Wetlands include swamps, marshes, taro lands and bogs, among others.

Glossary (continued)

Hawaiian Language Terms

‘āina - land, earth.

alaloa - main road or trail around an island, a long road.

alahahele - pathway, route, trail.

heiau - a traditional high place of worship in Hawai‘i, pre-Christian shrine or temple.

holo holo - to go for a walk, ride, or sail.

ho‘olaulima - work together.

i mua - to progress, go forward.

iwi - the bones of the dead, considered the most cherished possession in Hawaiian culture.

Ke Ala Hele Makalae - ‘The Path that Goes by the Coast’ - 6.6 miles of developed multi-use paths along the eastern coast of Kaua‘i.

kalo - taro.

kama‘āina - native born, host.

keiki - child or children.

kupuna - grandparent, ancestor, elder.

lo‘i ai - taro patch.

maka ‘āinana - people of the land.

makai - ocean. Toward the sea.

mālama ‘āina - to take care of the land.

mana‘o - thought, idea, belief, opinion, suggestion.

mauka - inland.

mele - song, anthem or chant.

mo‘olelo - story, tale, myth, legend, or tradition.

‘ohana - family, relative, kin.

pono - proper, righteous, just, fair, beneficial.

wai - fresh water.

waiwai - prosperity, wealth, assets.

Acronyms Used in this Report

DLNR - Department of Land and Natural Resources

HAR - Hawaii Administrative Rules

IMBA - International Mountain Bicycling Association (www.imba.com)

HRS - Hawaii Revised Statutes

SHPD - State Historic Preservation Division (a division of the DLNR), agency responsible for administering the historic preservation review process of the DLNR as specified in Hawaii Administrative Rules 13§13-284.

USFWS - United States Fish and Wildlife Service

APPENDICES

Appendix 1 - NSPAR Planning History/Timeline

PRE 2011

1977 – Bike Plan Hawai‘i. A statewide planning effort to integrate bicycling into the state’s transportation system. First published in 1977. Updated in 1994 and again in 2003.

Late 1990s – Bike Plan Hawai‘i

Opportunities for community input into possible path routes for the North Shore through a public planning process. Routes recommended by community appear in 2003 update.

1999 – Kaua‘i Path Organization. Our late mayor Brian Baptiste convened a group of citizen volunteers to help to develop a plan for protecting public access on Kaua‘i. This group has evolved into Kaua‘i Path, which is a non-profit organization that advocates for better biking and walking facilities island-wide.

2003 – Bike Plan Hawai‘i. Most recent update containing conceptual path routes for Kaua‘i’s North Shore.

2000-2011 – Ke Ala Hele Makalae

“The Path that Goes by the Coast” – 6.6 miles of coastal multi-use paths developed on eastern coastline. Additional phases currently under various stages of planning and construction.

2008 – North Shore Community Meeting

Community member and bike path advocate Michaelle Edwards convened a community meeting to promote the creation of biking and walking paths on the North Shore. Featured guest speaker Joey Kline with the International Mountain Biking Association (IMBA) www.imba.com

2008- Landmark Consulting Services Engaged by Kaua‘i Path Organization to initiate a more intensive multi-use path planning effort on the North Shore.

April 2009 – North Shore Community Input Meeting

Led by Landmark Consulting Services with presentations from Kaua‘i Path and Merle Grimes, this meeting presented conceptual information about the North Shore Path project and invited community members to share their input and route recommendations on large base maps. Approximately 100 attendees.

2009-2010 – Fundraising. Kaua‘i Path pursues funding for the North Shore Path planning effort.

2011

Jan – CDC Grant Awarded. A CDC (Centers for Disease Control), Communities Putting Prevention to Work (CPPW) Grant is awarded to Kaua‘i Path Organization, which includes a \$30,000 budget allocation for the NSPAR.

Kaua‘i Path – 501(c)3 Non-Profit Status Awarded

After a long effort, Kaua‘i Path Organization comes of age and is awarded independent non-profit organization status with the Internal Revenue Service. This represents a significant step in the maturity and accomplishments of the organization.

North Shore Path Alternatives Report (NSPAR) contract awarded to

Landmark Consulting Services.

Feb-June – NSPAR Research. Landmark Consulting conducts extensive research and holds numerous meetings with community members, regulators, Mayor Carvalho, Kaua‘i County Planning Department staff, State Department of Transportation officials, key landowners, and Kaua‘i Path Board. Extensive written, email, and social media outreach to community and elected officials.

May – NS Path Website Goes Live (nspath.kauaistyle.com)

Community Input Survey. Postcards with information about the North Shore Path planning effort are sent out to approximately 4,500 registered mail recipients on the North Shore in the communities of Kilauea, Anini, Princeville, Hanalei, Wainiha and Haena. Postcards encourage people to get online, learn about the project, and take the survey.

Kilauea Neighborhood Association (KNA). Landmark Consulting does a public NSPAR informative presentation to the KNA with solicitation for community input.

Hanalei to Haena Community Association (HHCA). Landmark Consulting does a public NSPAR informative presentation to the HHCA with solicitation for community input.

Princeville at Hanalei Community Association (PHCA). Landmark Consulting does a public NSPAR informative presentation to the PHCA with solicitation for community input.

June-August – Meetings with Key Landowners

June – Project & Planning Information Sent to State & County Government Leaders

June 14th – KKCR Community Radio Show. Live, interactive radio show allowing listeners to call in and share their input about the North Shore Path Planning Effort.

July – NSPAR Public Input Survey Ends (July 31st Deadline). 534 total respondents. 91.6% of respondents are “strongly in favor” of a North Shore Path project with another 6.0% “somewhat in favor.” Survey winner Wendy Sherman wins a shiny new Marin bike!

Aug – Landmark Consulting Prepares DRAFT NSPAR for internal review by Kaua‘i Path Board.

Sept – DRAFT NSPAR review & Edits from Kaua‘i Path Board

Oct – Meeting with Hanalei Hā‘ena Historic Road Committee

Landmark Consulting Presentation to North Shore Rotary Club

Dec – Completion of Final NSPAR. Report provided to Kaua‘i Path Board of Directors and Mayor Bernard Carvalho for final internal review.

2012 - NEXT STEPS

Feb – North Shore Path Alternatives Report Public Release

April-Dec. – Public Meetings & Project Fundraising

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Appendix 3 - NSPAR Survey Results

North Shore Path Survey



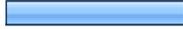
1. In General, are you in favor-of OR opposed-to the creation of a network of shared-use paths (for biking, walking and other non-motorized modes of transportation) to link together the communities of Kilauea, Princeville & Hanalei?

		Response Percent	Response Count
Strongly In Favor		91.3%	528
Somewhat In Favor		5.9%	34
Neutral – Neither for or Against		0.5%	3
Somewhat Opposed		0.9%	5
Strongly Opposed		1.4%	8
answered question			578
skipped question			0

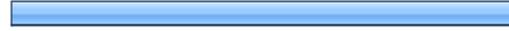
2. Do you currently ride a bike, walk or use other non-motorized transportation to get to or from (check all that apply):

		Response Percent	Response Count
Work		22.5%	130
School		4.8%	28
Beaches		47.9%	277
Stores/Shopping/Errands		56.7%	328
None of the Above		18.2%	105
Other (please specify)		24.0%	139
answered question			578
skipped question			0

Appendix 3 - NSPAR Survey Results

3. What are the primary reasons why you currently bike, walk or use non-motorized transportation (check all that apply)?			
		Response Percent	Response Count
For Health and Fitness (Exercise)		91.7%	530
To Lessen my Environmental Impact (Carbon Footprint)		59.7%	345
For Convenience		30.3%	175
To Save Money		39.3%	227
To Save Time		12.3%	71
To Spend Time Outdoors		77.3%	447
Other (please specify)		10.4%	60
answered question			578
skipped question			0

Appendix 3 - NSPAR Survey Results

4. What are the primary reasons why you do not currently bike or walk to places in and around your community (check all that apply)?			
		Response Percent	Response Count
Existing roadways, bike paths and sidewalks are too dangerous, inadequate or non-existent.		87.2%	504
It is too rainy on the North Shore for biking and walking.		3.6%	21
I don't like to exercise.		0.5%	3
Other (please specify)		15.1%	87
answered question			578
skipped question			0

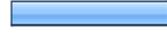
5. Do you own a car?			
		Response Percent	Response Count
Yes		94.3%	545
No		5.7%	33
answered question			578
skipped question			0

Appendix 3 - NSPAR Survey Results

6. Do you own a bike?			
		Response Percent	Response Count
Yes		85.3%	493
No		14.7%	85
answered question			578
skipped question			0

7. What is your age?			
		Response Percent	Response Count
Under 15 years old		0.9%	5
15 to 18 years old		0.2%	1
18 to 25 years old		3.3%	19
25 to 35 years old		16.3%	94
35 to 50 years old		35.1%	203
Over 50		44.3%	256
answered question			578
skipped question			0

Appendix 3 - NSPAR Survey Results

8. How many days per week do you currently exercise for at least 30 minutes or longer?			
		Response Percent	Response Count
Never or Rarely		2.9%	17
Once or Twice a Week		18.2%	105
3-4 Days a Week		38.4%	222
5-6 Days a Week		26.5%	153
Every Day		14.0%	81
answered question			578
skipped question			0

9. Have you ever used the new coastal path on the east side of Kauai (near Kapaa and Kealia)?			
		Response Percent	Response Count
Yes		77.0%	445
No		23.0%	133
answered question			578
skipped question			0

Appendix 3 - NSPAR Survey Results

10. If there were a shared-use path in your community, do you think that you and/or members of your family would use it to (check all that apply):

	Response Percent	Response Count
Go to Work	38.6%	223
Go to the Store and Run Errands	75.4%	436
Go to the Beach	79.9%	462
Go to School	18.5%	107
For Regular Exercise	92.7%	536
Other (please specify)	11.2%	65
answered question		578
skipped question		0

11. Where do you live?

	Response Percent	Response Count
Kilauea	35.8%	207
Princeville	28.2%	163
Hanalei	8.5%	49
Wainiha	4.3%	25
Haena	4.3%	25
Other (please specify)	18.9%	109
answered question		578
skipped question		0

Appendix 3 - NSPAR Survey Results

12. Generally speaking, do you support or oppose the proposal for a pedestrian bridge (for biking and walking) over the Kalihiwai River near the beach utilizing the existing right-of-way and the old bridge foundation?

	Response Percent	Response Count
Support	96.2%	556
Oppose	3.8%	22
answered question		578
skipped question		0

13. Generally speaking, do you support or oppose biking and pedestrian improvements to the historic Hanalei Bridge?

	Response Percent	Response Count
Support	89.1%	515
Oppose	10.9%	63
answered question		578
skipped question		0

14. Generally speaking, do you support or oppose a County or State taxation measure to raise funding for the construction and maintenance of multi-use paths?

	Response Percent	Response Count
Support	62.1%	359
Oppose	12.1%	70
Neutral - Neither for or Against	25.8%	149
answered question		578
skipped question		0

Appendix 3 - NSPAR Survey Results

15. If paths are constructed on the North Shore, would you be willing to volunteer your time periodically to help to maintaining the paths through a community "Adopt-a-Park" program?

		Response Percent	Response Count
Yes		78.5%	454
No		21.5%	124
answered question			578
skipped question			0

16. Do you support the following types of paths (check all that apply)?

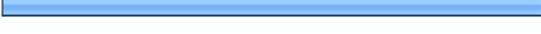
		Response Percent	Response Count
Asphalt & Concrete		73.0%	422
Permeable Concrete		74.6%	431
"Soft Surface Paths (Coral, Gravel or Similar)		54.3%	314
Dirt Paths		50.0%	289
None of the Above		2.1%	12
answered question			578
skipped question			0

17. Please share any other comments or input that you may have.

	Response Count
	223
answered question	223
skipped question	355

Appendix 3 - NSPAR Survey Results

18. To stay involved and be informed about future North Shore Path updates & events, please provide us with your contact information.

		Response Percent	Response Count
Name:		100.0%	578
Address:		100.0%	578
Address 2:		10.2%	59
City/Town:		100.0%	578
State:		100.0%	578
ZIP:		100.0%	578
Email Address:		93.1%	538
answered question			578
skipped question			0

