



Oct 2017-Sept 2022  
5 Year Road Plan

March 11, 2017

# Presentation Overview

- Introduction
- Accomplishments/Challenges Since Last Meeting
  - FEMA, Floods, Ulapau
- 2015/16 Completed
  - 2016/17 City Streets Completed
- Building FY 2017-22 Plan
- Expected View at 2022
- Road Plan Details
- Items Needed for Success
- Looking to the Future





# BCWCID Road Committee & Unit Assignments

- Jim Ouellet – BCWCID General Manager - Committee Chair
- Sam Kier & Tammy Eden – BCWCID #2 Directors
- Susan Barrie – Unit 1
- Jon Eden – Unit 2
- Steve Ross – Unit 3
- Mary Jo Creamer – Unit 4
- Paul Kimball – Unit 5
- Alma Rodriguez – District's Administrator
- Tyler Walsh - Operations Manager
- John Creamer – BCWCID Board President

# First 40 years

## Tahitian Established in the 70's All Platted and Road Designs Approved

- All Arterial Roads Completed
- 50% of Collector Roads Completed
- 40% of All Roads Completed 25M of 65M
  - Next 6 years should get 85% of **current** homes on County / City Roads
  - Approx 10M; Leaving Approx. 30M to-go
- 58% of Residents on Completed Roads as at January 1, 2017
- Approx. 1425 Homes in Total (Increase of 88 from last year)
  
- Funded Via Road District Statute
  - \$15 per lot per Month .. **Max by Current Statute**
  - **All lots (Vacant & Occupied)**
  - Currently at \$13 (2017) \$860K in Estimated Revenue

# Brief Review of Main Process Changes Beginning 2014

- Road Selection changed to Prioritization by Highest Home Density
  - Home Density is defined by the highest # of homes per feet of street where the smallest Home Density factor = the highest density of homes
    - 10 homes/1000 feet of street (or 100 Home Density) is prioritized above 4 homes/1000 feet of street (or 250 Home Density)
- Other Factors Used for Selection
  - Roads within Fire Area where Fire Money awarded by State can be used (Now Complete)
  - Feeder Streets where multiple highly populated roads feed thru a lesser populated road
  - Emergency Needs /Bus Routes
  - High Risk Roads
  - Logical Groupings for County Efficiency
  - Roads, Once Completed, Will Be Accepted by County
- 70% of Road Fees collected to be used for Road Construction; 30% for Road Maintenance
  - Theoretically: Roads, not on the frozen 2 Yr portion of the 5 year Plan for Construction, will be repaired using available Road Maintenance Funds (exceptions may be made for High Risk Roads)

# Progress Since New Process For Selecting/Paving Roads

- 177 in 3 years Total 839 # of Homes Now on Paved Streets
  - Over 25% Increase in 3 years
- 4.43 # of Miles Paved (Average 1.48/Year)
  - While 3 Floods delayed progress
  - 1.98:2014; .38:2015; 2.11:2016
  - Assumes 2016/2017 completion this summer
- 2 of 3 Years we have met or exceeded our goal of 1.6 miles/year
- Residents/Builders gaining confidence in path toward predictability of streets to be paved next within 2 years (forgoing any disasters/funding issues)
  - Evidenced by high # of homes being built on Roads planned for Year 1 or Year 2 of Current Plan

# Estimated Funds for Road Construction/Road Maintenance

## 2017 Revenue Estimates

- \$860k collected from Road Revenue (Increase from \$132 to \$156)
  - Assumes 67% Collection C/Y - \$635K; Plus \$225K from Aged AR

2016 Cash Balance For Roads (Maintenance & Construction) \$510K

## Updated Budget

- \$300k - Base Costs -Road Crew (\$120), G&A (Billing,Collection/Legal etc) (\$90), Engineering (\$90), etc
- \$160k - Annual Road Maintenance Material & Subcontract Cost (Minimum for basic repairs)
- \$300K – FEMA Road Costs (Net \$75K to District)

## Remaining Funds

- \$325K remains for Road Construction Materials (at \$200k-250k/mile = 1.3-1.6 mile of road per yr.)
  - Assumes City/County Interlocals Only & Prep Work

## Positive Impact towards Maintenance Goal

- **\$17.5K Donation by TV POA – Thank you**

# 2016/17 Flood/Road Maintenance Priorities

- Flood - Repairs taking priority (County & District)
- Major issues developed
  - Road closings, water/sewer line exposure issues, Road deterioration, Safety Issues
  - FEMA will fund 75% of costs
    - FEMA Projects Finally Approved – and work has started
    - Work to be done in 2017
    - Reviewing Maintenance Process – Should we top coat repairs to preserve them under Road Maintenance
    - Cash is in the Bank
      - » District is reimbursed after work is completed (75% of approved Amount)
- Progress toward FEMA maintenance completion
  - 26 Roads requiring general maintenance and/or rock base (7 completed)
  - 10 Roadway Culverts to be replaced/repaired (1 completed)
    - Bid Underway for Remaining Sites
  - 4 Landslide Projects
    - Engineering and/or Quoting underway



# Accomplishments Since Last Road Meeting

- Road Committee Back To Full Strength
- Pre-Approval Work with FEMA Now Complete
  - Delayed Due to Additional Disaster in 2016
- Ulapau Circle Completed
- FY2016 City Roads Started Early & Complete
  - (Olaa, Pahala, Homonu)
- Cash Budgeted Last Year For FEMA ; In Bank
- Working with County and State Governments on Additional Funding Sources
- Interlocal Agreement with County for 2016/2017 Roads completed (Nov 2016)
- 2017/2018 Roads Surveyed in Preparation for Coming Year

# 2016/17 Challenges toward Planned Construction

Challenges still exist for 2016/2017 plans to be achieved

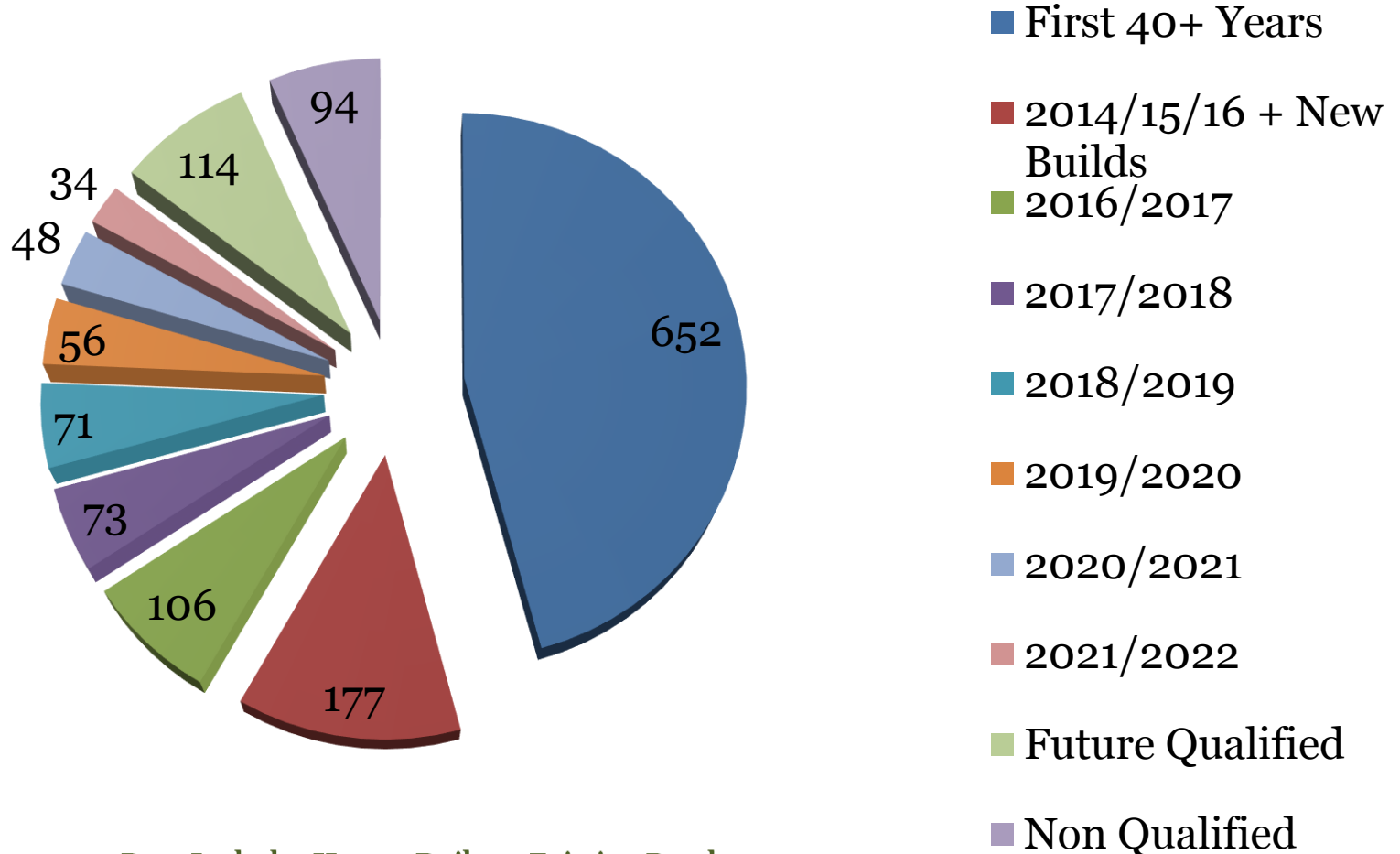
- Road Material Cost Continues to Rise – Current Estimate at \$200K/mile
  - 2 years ago was \$120k/mile
- County Concerns toward completing 2016/2017 Roads by End of Summer 2017
  - County Precinct #1 Road Crew is not at full strength
  - County FEMA issues must be first priority
    - » Usually we would have started by now
      - County to start in June if FEMA issues corrected
      - County Precinct#1 has other non FEMA issues to resolve as well
- County has requested District Contract Out “Prep work” on Konahuanui
  - Board supports this plan
  - This road is complicated and portions require being moved to within survey points and a road crossing requiring cement work.
- Other County Roads
  - Lamaloa, Papaloa, Pele Ct, Kaupo & Kanaio – “Easy” Roads for County Crew once at full strength

## Last Year's Presentation Summary Compared to This Year's

Year	2016 Meeting Miles Paved	2017 Meeting Miles Paved	Change	2016 Meeting # Homes Added	2017 Meeting # Homes Added	Change
2016/2017	1.86	2.11	0.25	83	106	23
2017/2018	1.56	1.74	0.18	61	73	12
2018/2019	1.55	1.79	0.24	79	71	-8
2019/2020	1.75	1.59	-0.16	54	56	2
2020/2021	1.73	1.72	-0.01	57	48	-9
2021/2022	0.00	1.63			34	
2016/2021						
Total	8.45	8.95	0.50	334	354	20

# Road Construction Progression Since New 2014 Plan Process

**Homes Under Approved Roads Now 58% going to 85%**



Data Includes Homes Built on Existing Roads

# Key Factors in Building Oct 2016/Sept 2022 - 5 Year Plan

- Average 1.6 miles/year
- Re-churned Density Figures
  - Freeze FY 2017 (2017-2018) & FY 2018 (2018-2019)
  - Surveys already completed for 2016 (costs already incurred)
  - Water/sewer work completed for 2016 (Lamaloa)
- When Planning FY2019/22 - take into consideration all new builds and reprioritize again ALL roads for construction based on home density.
  - Removed Kokomo from the 5 year plan – High Density but County Input was they would not accept that road with current flood issues. Therefore it no longer meets the criteria.

# Data Assessed to Build New 5 Year Plan

- Bastrop WCID Master Plan by BEFCO (Updated with FY2015-16 Paved Rd Data)
  - Streets Paved (by Feet)
  - Streets Not Paved (by Feet)
- List of Active Water Meters (Updated with New Home Builds in 2016)
  - Houses on Paved streets
  - # of Houses on Unpaved streets
  - Feet of Unpaved Street divided by # of Houses on that Street
- Bastrop Bus Routes (Remains the same)
- BCWCID Maps (Updated with New Road Paved Data)
  - Connection to County Roads
  - Collector Streets
  - Feeder Streets & the streets that feed into each (where other streets access a feeder street to get out of their area)

# New 5 Year Plan – Items Needed for Success

## **Factors Affecting Maximum Allowable Annual Road Construction**

1. County ability to complete 2016/2017 Roads this Summer in order to keep our New 5 Year Plan on Track to begin Oct 1 2017.
2. Total Funds Collected from Road Fees and other sources needs to continue to grow to meet inflation or greater.
  1. Looking to Change Statute to Increase Maximum Fee Pus Other Efforts with County for funding
  2. Review for Appetite for Debt /Bond (To be re-paid with Road Fees)
3. Timely reimbursement from FEMA & Fire Funding for Roads Repaired/Constructed.
4. Significant changes for Materials and/or Project Costs have been demonstrated to greatly affect our planned pace of construction. Any new increases will have the same effect.
5. Resources/Equipment availability by County and/or City are critical to our success.
6. No New Disasters!! Ie – flooding, fires, etc.
7. Need to Improve Collection Rates

# Road Projects – Oct 2016/Sept 2017

Unit	Collector Road	Total Paved	Street	Length of Unpaved Road Measured by Feet	Homes	Feet Between Homes Being Paved	Avg Home Density of Roads to be paved serviced by feeder	Initial Year Planned	Bus Route Y/N	Comments	
1	CI	Collector	750	Olaa	950	5	190	2015/16	No	City committed to complete	
1	CI		750	Pahala Ct	750	12	63	108	2015/16	No	City committed to complete
1	CI		650	Homonu Ct	650	5	130	2015/16	No	City committed to complete	
1	CT	Feeder	1100	Papaloa Lane	1100	10	110	<b>88</b>	2015/16	No	Survey completed. Off Kona
1	CT		220	Pele Ct	220	5	44	2015/16	No	Survey completed. Ct off of Papaloa	
5	CT		1800	Lamaloa	4225	11	164	2014/15	No	Culverts-wastewater work completed. Survey completed. Delaying again could create more costs. Paving between Nuuanu and Nuuanu	
2	CT		1440	Kanaio	1440	25	58	2015/16	No	Survey completed. Off Koloiki	
2	CT		2120	Kaupo	2120	20	106	2015/16	No	Survey completed. Off Koloiki	
4	CT		2120	Konahuanui Lane	2120	13	163	2015/16	No	Survey completed, Engineers agree on solution to Tree in Road. Paving Road between Akaloa & MokuManu	
Total			10950		Homes Paved	106					
County	1.66 miles										
City	0.41 miles										
WD	0.00 miles										
Total	2.07										

**City Roads Completed  
County Roads Planned for Summer**



# Proposed Road Projects – 2017/2018 (Year 1)

Unit	Collector Road	Total Paved	Street	Length of Unpaved Road Measured by Feet	Homes	Feet Between Homes Being Paved	Avg Home Density of roads to be paved; serviced by feeder	Initial Year Planned	Bus Route Y/N	Comments	
1	CT	Feeder	1640	Pahoiki Lane	1640	15	109	94	2016/17	No	Committed. Off Kaanapali
1	CT		160	Kou	160	3	53		2016/17	No	Committed. Ct off Pahoiki
1	CT			Kaliu	360	1	360				
1	CT		850	<b>Kulua Ct</b>	850	<b>8</b>	106		2017/18	No	Off Kaanapali. ADDED in 2017
1	CT		400	<b>Kimo Ct</b>	400	6	67		2017/18	No	Off Kaanapali. ADDED in 2017
1	CT		900	<b>Ahumoa</b>	900	7	129		2018/2019	No	Off Kaanapali. ADDED in 2017
2	CT	Feeder	1450	Pahihi North	1450	8	181	68	2016/17	No	Committed.
2	CT		800	Kaena Lane	800	7	114		2016/17	No	Committed. Off N. Pahihi
2				Awehi Lane	1320	4	330				
2				Koolua Dr	2090	7	299				
2				Haleakala Dr	2200	1	2200				
2				Kaenapapa	800	2	400				
2				Laaui Ct	650	4	163				Does Not Qualify due to not connected to county Road. Off Haleakala
2	CT	Feeder	2430	S. Papawai Dr	2430	<b>12</b>	203	157	2016/17	No	Committed
2	CT		220	Koae Ct	220	3	73		2016/17	No	Committed. Off Papawai
2	CT		350	Huelo Ct	350	4	88		2016/17	No	Committed. Off Papawai
Total			9200		Homes Paved	73					
CT	1.74	miles			Homes with Improved Access	19					
CI	0.00	miles									
WD	0.00	miles									
Total	1.74										

**Roads in Bold Newly Added**  
**All Other Roads Committed Last Year\***  
**\*Pending no significant issues not yet identified**

# Proposed Road Projects – 2018/2019 (Year 2)

Unit	Collector Road	Total Paved	Street	Length of Unpaved Road Measured by Feet	Homes	Feet Between Homes Being Paved	Avg Home Density of Roads to Be Paved; serviced by feeder	Initial Year Planned	Bus Route Y/N	Comments	
2	CT	Collector	1100	Pahalawe Lane	1100	4	275	81	2017/18	Yes	Off Tahitian
2				Alele	3150	13	242		Paved	Yes	Already Paved
2				Pukoo	1950	7	279		2019/20		
2	CT		1740	Kaapahu	1740	11	158	2017/18	No	Between Alele & Pahalawe	
3	CT	Feeder	600	Kaewakapu	4300	2	300	138	2018/2019	No	Short cut used to get to Airport (pave point from Lamoloa to Kaeleku)
3	CT		500	Kaeleku	500	6	83		2017/18	Yes	Off Airport Rd
3	CT		1700	Haliimaile	1700	25	68	2016/17	No	Between Keanahalululu and Airport	
5	CT	Feeder	2200	Keanahalululu Ln	2200	11	200	137	2018/19	No	Eastern end up hill. Pave full remaining portion
5				Kapapa	130	2			No		
5				Nuupia	300	2			No		
5				Kaimuki	520	1			No		
5				Olomana	350	0					
5	CT	Feeder	900	Mokulua Lane	3230	8	113	114	2016/17	1 stop	Bus goes down between Pohakulua and Waikakaaua. Pave only between those 2 streets
5	CT		700	Waimalu	700	4	175		2016/17	No	Off Mokulua
5				Kipapa	420	2	210			No	
Total			9440		Homes Paved	71					
					Homes with Improved Access	27					
CT	1.79										
CI											
WD	0.00										
Total	1.79										

## Newly Committed Roads Under 2017-2022 Road Plan Year 2\*

\*Pending no significant issues not yet identified





# Proposed Road Projects – 2021/2022 (Year 5)

Unit	Collector Road	Total Paved	Street	Length of Unpaved Road Measured by Feet	Homes	Feet Between Homes Being Paved	Avg Home Density of Roads to be Paved; serviced by feeder	Initial Year Planned	Bus Route Y/N	Comments
2	CT	2430	Kahalulu	3150	10	243		NEW		Pave between Kainalu & Nakalele
2	CT	1950	Pukoo	1950	7	279		2019/20		Between Pahalawe and Alele
2	CT	1200	Koali	1200	4	300		2019/20	No	Between Kaanapali & Alele
2	CT Feeder	1000	Onini	1000	4	250	200	2018/19	No	Off Kaanapali
			Kolo Ct	350	1	350				
4	CT	800	Keaau Ct	800	4	200		2018/2019		Off Wahane
4	CT Feeder	1250	Nanakuli Dr	1250	5	250	178	2018/19	No	Off Wahane
			Kaupa Ct	400	2	200				
Total		8630		8380						
CT	1.63			Homes Paved	34					
CI				Homes with improved Access	3					
WD	0.00									
Total	1.63			Total Homes Paved 2017-2022	282					
				Total Qualified Homes Left Unpaved	114					
				Total Non-Qualified Homes Left Unpaved	78					





# **THANK YOU**

**Commissioner Hamner from Bastrop County Precinct 1**

**Trey Job from City of Bastrop**

**Tyler Walsh with BCWCID#2**

**BEFCO & County Engineering**

**& ALL Your Crews**

**For Your Tremendous Cooperation & Teamwork**

**TVPOA For Donations Towards Materials**