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The Impact of Cargo Bikes on Travel Patterns: Survey Report Spring/ Summer 2014

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CRP 425 Bicycle and Pedestrian Planning

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The Impact of Cargo Bikes on Travel Patterns: Survey Report

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Executive Summary

Cargo bikes are becoming increasingly available in the United States with vendors such as Yuba, Trek, XtraCycle, and Marin all offering platforms. While a large body of research has continued to investigate traditional bike transportation, cargo bikes offer the potential to capture trips for those that might otherwise be made by car. To investigate this, a survey was conducted querying how use and travel characteristics changed upon cargo bike ownership (N = 299; 95% Confidence Interval +/-6%).

This report documents that research effort. In sum, prior to owning a cargo bike, 60% of the survey respondents traveled via car. Most of these trips (68%) were work related, and 53% of those surveyed dropped off kids on these trips. After purchasing a cargo bike, 19% reported their car / auto as their primary mode, a 41% reduction in auto trips. (69% respondents used their cargo bike as their primary mode of travel after purchase.) The number of auto trips appeared to decline by 1-2 trips for these individuals, and many of these were for trips that total 3-10 miles per day (*anecdotally more than average*). 62% had considered giving up a vehicle as a result of their cargo bike ownership. Connection between having kids and cargo bike trips to work suggests that focusing on families with small children (unable to ride a bike) are a key correlation and growth area for bicycle transportation. More research is needed in this area.

Approximately 50% of respondents made over \$100,000 in household income per year, which reflects an upper to middle class income. There also may be practical limitations with regard to bicycle parking space size, given the size of these cycling platforms. Based on these results, potential policy opportunities might lie in considering improved focus on matching infrastructure for bike parking to these new and evolving platforms. Further research could include focus on overcoming weather-related / elemental barriers (perhaps with an e-assist capacity), which continue to be an obstacle to every day cycling, and further investigation into families modeling healthy behaviors to children due to the use of cargo bikes.

Introduction

During the spring and summer of 2014 a survey was conducted of evaluating the potential change in travel behavior of individuals purchasing a cargo bike. A total of 299 individuals over the age of 18 chose to participate and roughly 84% of which (246) owned a cargo bike. Respondents were primarily from the US (84%) and Canada as indicated in Table 1. (Results were significant at the 95% Confidence Interval +/-6%).

Value	Count	Percent
Anonymous Proxy	1	0.3%
Australia	3	1.0%
Belgium	2	0.7%
Canada	17	5.7%
Chile	1	0.3%
France	6	2.0%
Germany	4	1.3%
Ireland	2	0.7%
Mexico	2	0.7%
New Zealand	1	0.3%
Norway	1	0.3%
Peru	1	0.3%
Singapore	1	0.3%
Slovakia	1	0.3%
Spain	1	0.3%
United Kingdom	5	1.7%
United States	249	83.3%
Uruguay	1	0.3%
0,1		

Table 1: Home Address of Survey Respondent

Table 2 indicates that most of the bike owners surveyed rode Yuba bikes, but roughly 30% rode other models. Specifically, 153 (60.5%) of the participants owned a Mundo, and 26 (10.3%) participants owned an elMundo. The Boda Boda and elBoda Boda were less popular with 30 (11.9%) and 20 (7.9%) participants owning these models. A total of 51 participants (20.2%) reported that they ride other models, which include Xtracycle, Bullitt, and custom manufactured bicycles. Additionally, 29 (11.5%) of the participants reported that they own several models of cargo bikes, the most popular being Xtracycle and electric versions of various models.

Table 2: Type of Bike

Value	Count	Percent
Mundo	153	60.5%
elMundo (electric)	26	10.3%
Boda Boda	30	11.9%
elBoda Boda (electric)	20	7.9%
I own a	51	20.2%
I also own a	29	11.5%

Most participants reported having one or two cars in their household. 128 (44.1%) own one vehicle while 113 (39.0%) reported having two. 33 (11.4%) participants reported that they do not own a car, and only 16 (5.5%) reported owning three or more cars.

Of those who participated most, 130 (69.1%) were male. 80 (38.1%) were female. A majority of the participants were between the ages of 34-48. Participants were asked to define their racial background. Participants were predominantly White, 181 (87.0%), 14 (6.7%) responded Other, 8 (3.8%) responded Asian, 3 (1.4%) responded Native American, and 2 (1.0%) responded Black. Other, Open-Text, responses were mostly of two or more ethnicities.

Participants were asked to identify the highest education level they have completed. The highest levels included a Bachelor's degree with 79 (37.1%) responses and a Master's degree with 64 (30.0%) responses. Following, 20 (9.4%) have a Doctorate degree, 15 (7.0%) have Some College, 13 (6.1%) have an Associate's degree, 8 (3.8%) have a Law degree, 6 (2.8%) have a High School/GED, 6 (2.8%) have a Trade or other technical school degree, and 2 (0.9%) have a Medical degree. None of the participants marked having only some high school education.

With regard to household income respondents were fairly affluent. 68 participants, nearly a third (33.8%) of the total number of participants, said that their yearly household income is between \$100,000-\$200,000. 41 (20.4%) participants make between \$75,000-\$100,000, 30 (14.9%) make between \$50,000-\$75,000, 24 (11.9%) said they make between \$200,000-\$500,000, 23 (11.4%) said they make between \$25,000-\$50,000, 12 (6.0%) said they make under \$25,000, and 3 (1.5%) said that they make over \$500,000. Thus, near 50.0% of the participants have a yearly household income of over \$100,000 dollars.

The participants were asked to identify how many people live in their household. The most common size was 4 individuals with 37.4%. Shortly behind, family sizes of 2 and 3 had response sizes of 23.7% and 22.3% respectively.

When asked how many children were living in the house under the age of 6, the greatest response was 0 children with 45.3% of the responses. 25.9% participants said one child, while another 24.5 % said two. Table 3 illustrates these responses.

Table 3: Number of Children

Value	Count	Percent
0	96	45.3%
1	55	25.9%
2	52	24.5%
3	8	3.8%
4	1	0.5%
5	0	0.0%
6	0	0.0%
7	0	0.0%
8	0	0.0%
9	0	0.0%
10	0	0.0%
more than 10	0	0.0%

Survey Structure

The stated preference survey was structured in a way to gather information both before and after the purchase of a cargo bike. To do this, respondents were first asked a series of questions about their travel behavior before they owned a cargo bike. They were then queried about their behavior after owning the bike using the same sequence of questions.

While the survey is limited in that it only assessed those who had already self-selected to purchase a cargo bike, it provides characteristics about those who engage in that selection, and details about how they influence travel behavior for those who choose to use them as a mode. After all travel behavior questions, basic demographic questions were asked including age, income, race, and home zip code.

The survey complied with all human subjects requirements and was approved by the Cal Poly, San Luis Obispo Committee for the Protection of Human Subjects. All responses were anonymous.

Before Owning a Cargo Bike

As a first travel behavior question, participants were asked the following: "Thinking about the typical week BEFORE you owned your bike, what was the primary way you got around each day?" They were asked to consider each leg of a trip and choose the most frequent or most used mode for both commute and non-commute trips.

Before owning a cargo bike, 138 (59.5%) of the participants commuted by use of car, truck, or other auto means. The second most popular mode was the use of a traditional bicycle, with 65 (28.0%) of the participants reporting this use. To follow, 13 (5.6%) used the bus and other transit, 9 (3.9%) walked, and 7 (3.0%) reported other options, which usually indicated multiple or varying modes (e.g. bike and subway; motorcycle, etc.)

Value	Count	Percent
Car / Truck / Auto	138	59.5%
Bus / Transit	13	5.6%
Traditional Bicycle	65	28.0%
Walking	9	3.9%
Other	7	3.0%

Table 4: Primary Travel Mode Prior to Owning a Cargo Bike

Trips per Day (via Primary Mode)

When asked how many trips per day each participant used his or her commute option prior to owning a cargo bike, 112 of the participants said twice, 50 of the participants said three times, 29 participants said four times, and the remaining 99 participants reported higher and lower volume responses.

Table 5: Trips per Day (via Primary Mode)

Count	Response
17	1
1	10
1	12
112	2
1	23
1	24
50	3
29	4
5	5
7	6
1	7
2	8
1	Bus

Trip Purpose

Prior to owning a cargo bike, participants were asked what their primary purpose was for using their prior commute mode. 156 (68.1%) of the participants reported work, 25 (10.9%) reported school, and 48 (21.0%) reported other reasons, such as errands, dropping a child off at school, going to the gym, or taking part in a child activity. Many of the other, open-text, responses dealt largely with child-related activities and involvement of children in errands.

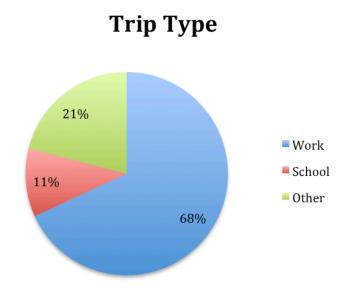


Figure 1: Trip Type Before Cargo Bike

Dropping Children

When asked if the participant dropped a child/children off on this trip 120 (52.9%) said yes, 78 (34.4%) said no, and 29 (12.8%) reported that this questions was not applicable to them. In most cases, this answer meant that the participant did not have children or this was an infrequent activity.

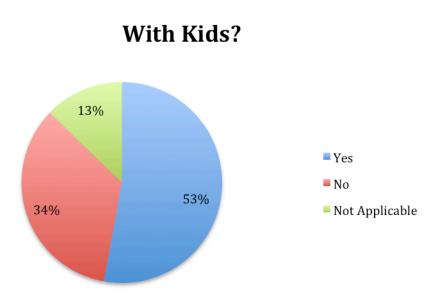


Figure 2: Travel with Children Before Cargo Bike

Secondary Mode of Travel

Participants were also asked to list their secondary transportation choice before owning a cargo bike – specifically the most frequent if any. 26.2% participants traveled via car/truck/auto, 33 (14.4%) said bus/transit, 54 (23.6%) said a traditional bicycle, 56 (24.5%) said walking, 22 (9.6%) said not applicable, and 4 (1.8%) reported other, such as the use of a personal driver or taking multiple modes.

Total Trips per Day

When asked about how many trips each participant made each day, the greatest responses were 2 trips, with 75 participant responses, and 1 trip with 71 participant responses. 21 participants reported that they took 4 trips, followed by 15 participants saying that they made 3 trips each day. The remaining 119 participants reported higher and lower volume responses, as indicated in Table 6.

Count	Response
11	0
71	1
2	10
1	15
75	2
1	20
15	3
21	4
4	5
9	6
1	7
1	8

Table 6: Total Trips Per Day Before Cargo Bike

After Owning a Cargo Bike

Afer answering these preliminary questions, respondents were asked to think about current travel patterns with the following question, "During the typical week AFTER you owned your bike, what was the primary way you got around each day?" They were again asked to consider each leg a trip and choose the most frequent or most used mode for both commute and non-commute trips. This question was used to judge if primary transportation mode had changed.

A total of 133 (68.6%) of the participants reported that after owning their cargo bike, their cargo bicycle became their primary mode of transportation. 37 (19.1%) participants used their car/truck/auto as their primary transportation mode. Roughly 10% of the participants (20 individuals) used a traditional bicycle, and the remainder used the bus and other modes. No participants listed walking as their primary option.

In comparison to usership prior to owning a cargo bike, 69% respondents used their cargo bike as their primary mode of travel after purchase. This equates to an over 40% reduction in car use. Compared to prior cargo bike ownership, the number of cargo and traditional bike riders rose from 65 (28.0%) to 154 (79.4%). 133 (68.9%) participants reported that this was a change from how they traveled prior to owning a cargo bike. 60 (31.1%) said that their primary transportation patterns did not change, despite the ownership of a cargo bike, suggesting that many had ridden bikes as their primary means of travel prior to owning a cargo bike.

Die 7: Frimary Travel Mode Frior Value	Count		Percent Change
		Percent	C C
Car / Truck / Auto	37		
		19.1%	-40.4%
Bus / Transit	2		
		1.0%	-4.6%
Traditional Bicycle	21		
		10.8%	-17.2%
Cargo / Utility Bicycle	133		68.6%
		68.6%	
Walking	0	0.00/	2.00/
	_	0.0%	-3.9%
Other	1	0.50/	2.50/
		0.5%	-2.5%

Table 7: Primary Travel Mode Prior to Owning a Cargo Bike

Factors Influencing Change

Participants were asked to self-report any factors or reasons for their change in transportation patterns. Popular responses included the ability to carry multiple children, groceries, and work

gear; it is easier to move around town and make local trips; and using the bike is enjoyable and fun, it saves time and money, and travel appears quicker and less stressful.

Trips per Day (via Primary Mode)

After ownership of a cargo bike, participants were asked how many trips they made using this mode. The greatest response was 2 trips from 75 of the participants. The second most popular was 4 trips, with 31 responses. 29 individuals said they took 3 trips and 20 said they took 1 trip. While the number of two trip responses remained the same to prior cargo bike ownership, the number of single trips decreased from 71 to 20 and the number of 3-4 trips went from 36 to 60. The increase in the number of bicycle riders and the decrease in single trips per day suggests that people are riding their bike more to do more activities.

Count	Response	
2	0	
20	1	
2	10	
75	2	
1	2-3	
1	20	
1	23	
29	3	
31	4	
7	5	
7	6	
1	8	

Trip Purpose

When asked what the primary purpose of these trips was, 113 (59.8%) said it was for work, 25 (13.2%) said it was for school. 27.0% described other reasons such as having fun with kids, errands, and appointments.

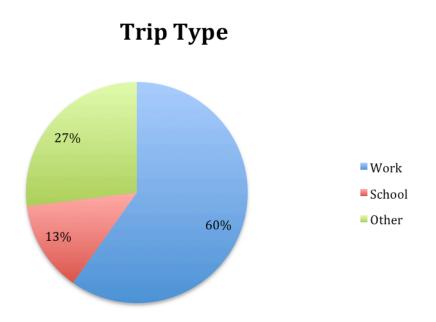


Figure 3: Trip Type After Cargo Bike

Dropping Children

When asked if the participant dropped a child/children off on their trip 109 (57.4%) said yes, 64 (33.7%) said no, and 17 (8.9%) reported that this questions as not applicable to them. Compared to prior cargo bike ownership, these numbers remained fairly unchanged. The number of child drop-offs decreased slightly, but the number of not applicable and no responses also decreased.

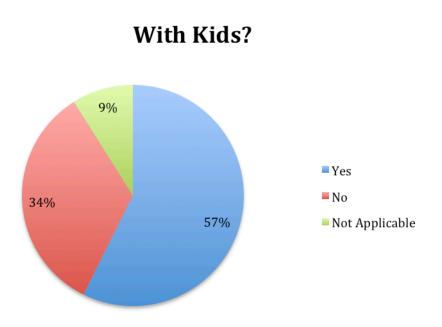


Figure 4: Travel with Children Before Cargo Bike

Secondary Mode

After ownership of a cargo bike, participants reported that their most used secondary transportation mode was a car/truck/auto with 71 (37.2%) responses, followed by a traditional bicycle with 39 (20.4%) responses, cargo bicycle with 30 (15.7%) responses, and walking also with 30 (15.7%) responses. 21 (10.9%) participants responded bus/transit, not applicable, or other, such as taking a taxi or have a combination of transportation means. Overall, between use of a traditional bicycle, a cargo bike, and walking, over 50% of the participants take part in active transportation as their secondary transportation method.

Total Trips per Day

When asked how many trips each participant makes each day, most reported 1trip with 61 responses and 2 trips with 58 responses. Other frequent responses included 3 trips with 16 responses, 4 trips with 15 responses, and 0 trips with 14 responses. Trips greater than 4 trips generated 18 responses.

Count	Response
14	0
61	1
1	10
1	12
58	2
1	22
16	3
15	4
1	42
5	5
7	6
1	7
1	8

Table 9: Total Trips Per Day After Cargo Bike

How Cargo Bikes are Being Used

More Bike Trips

After owning a cargo bike, 97 participants reported that they make "one or two more bike trips per day." 25 participants said that they make "three to four more trips per day", seven participants said that they make "five to six more trips per day", and 14 participants said that they "do not make any additional trips per day" after the ownership and usage of their cargo bike.

Count	Response
14	0
46	1
1	10
1	1900
51	2
11	3
14	4
2	5
5	6

Table 10: Additional Bike Trips After Cargo Bike

Number of Miles

Participants were asked how many miles they ride their cargo bike per day. Most commonly, 70 (37.2%) participants reported that they ride 5-10 miles per day. The second most common distance was 3-5 miles with 59 (31.4%) responses. Finally, 29 (15.4%) participants reported that they ride 11-15 miles per day, 14 (7.5%) participants ride 0-5 miles, and 16 participants (8.6%) reported riding 16-30+ miles per day on their cargo bike.

Table 11: Total Number of Miles Ridden on Cargo Bike

Value	Count	Percent
0-2 miles	14	7.5%
3-5 miles	59	31.4%
6-10 miles	0	0.0%
11-15 miles	29	15.4%
16-20 miles	11	5.9%
21-25 miles	2	1.1%
26-30 miles	1	0.5%
Over 30 miles	2	1.1%
5-10 miles	70	37.2%

Reason Don't Use Cargo Bike

Participants were asked what reasons they do not use their cargo bike as their primary transportation method. Responses came back fairly split between distance with 50 (26.6%) responses, weather with 49 (26.1%) response, and other, such as a lack of cargo to haul, traveling with small children, or poor parking conditions and chance of theft at particular destination, with 47 (25.0%) responses. Other factors included time with 32 (17.0) responses and having too much to carry with 10 (5.3%) responses.

Table 12: Reason for Not Using Cargo Bike	Table 12:	Reason	for No	t Using	Cargo Bike
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Value	Count	Percent
Distance	50	26.6%
Time	32	17.0%
Weather	49	26.1%
Too much to carry	10	5.3%
Other	47	25.0%

Give Up a Car

When asked if they had thought about giving up ownership of a car, truck, or other motorized vehicle as a result of their cargo bike, 116 (62.0%) said yes and 71 (38.0%) said no. To discover what motivation would cause them to give up owning and using a car, these responses were self-reported and free response. Some of the most frequent responses included better planning and infrastructure, including a citywide bike lane network, access to public transportation, protection from the elements, living closer to work/activities, and feeling safe and comfortable biking in their city. Over a dozen participants also reported that they have already given up their car, or they have cut down to one vehicle for their household. Many of their decisions to give up their car came with the purchase and use of their cargo bike.

Table 13: What it would take to give up a car

Count 1	Response
1	1. Improved reliability of mass transit. 2. Protection from elements on cargo bike.
1	2 more years on the kids
1	45 mph electric bike ain't gonna happen any time soon, huh?
1	A citywide bike lane network
1	A little more courage.
1	A lot, we thought about it but only briefly, we need a car for many things still.
1	A motor for my cargo bike for longer trips and hills.
1	Access to public transportation that took me where I needed to go
1	Already did it
1	Already did!
1	Already have
1	An alternative for longer journeys - eg shared car scheme
1	An e-assist and some kind of rain shield
1	Availability of Zip car or other short term rental
1	Being closer to work. If work was 30 to 40 minutes away by bike I would do it.
1	Better infrastructure.
1	Better planning
1	Better public transport in cold weather Better bike lanes due to riding with kids
1	Better public transportation in my city.
1	Better sun protection Better weather protection for my kids
1	Bike lanes and better lights on road.
1	Car in household is not mine to give up. :-) I essentially 'rent' it by paying mileage.
1	Cooler weather (Tucson,AZ in the summer gets 105-wish)
1	Couldn't. Move courthouses closer to my home.
1	Death or disability
2	Done
1	Easier and cheaper access to rental cars for long trips
1	Electric bike. Vello shield. Better tires. Better public transit.
1	Electric boost
1	Electric motor for hills
1	Fear
1	Feeling safe and comfortable commuting in inclement weather
1	Finish home renovations first Stop using our RV
1	Get rid of my wife :-p
1	Have my wife commit to a cycling lifestyle and moving closer to her job.
1	I already gave up car two years ago.
1	I already got rid of the car.
1	I did it.
1	I have already done so. I have been car-free for two years.
1	I have not owned a car since 2002. Don't feel any need. I need to live closer to work
1	I sold my car a few weeks after buying the cargo bike.
1	I sold my car at the same time I got my cargo bike.
1	I sold my car when I bought the cargo bike. We now have only one car between my wife and I.
1	I think owning the yuba has helped delay the purchase of a second car.
1	I will need to get a job in my own town.
1	I've never owned a car, but have reduced carshare use since getting a cargo bike.

Coun	t Response
1	If I had more time and fewer trips that I had to make.
1	If my current car will get very old and not working, I won't buy a new one.
1	If my wife gets a job closer to home as she's not comfortable biking to work
1	It was not necessary
1	Kids to be older
1	Lack of fuel.
1	Make enough money selling car to electrify the bike and save some on the side
1	More certainty about job locations and kid's school following move
1	More convenient mass transit. Better bike infrastructure.
1	More time or no time obligations. Perhaps when the kids leave for college
1	Moving closer to town, I live 100 miles away.
1	No snow in the winter, bike lanes to all needed destinations.
1	Not have little kids
1	Not having to travel long distances for work and risk stranding my spouse without a car
1	Not naving to traver long distances for work and risk stranding my spouse without a car Not much.
1	Once my children get older, I will.
1	Safer bike lanes
-	Safer roads better weatherI've lived places where I road more
1	
1	Secure bike parking Shower at work. Better seasonal weather
1	
1	Smaller work travel distance.
1	The effort of selling it.
1	Viable non car commute option, eg flexible carpool, vanpool, etc.
1	We already did give up a car.
1	We already did it. However, we are not considering getting rid of our one car.
1	We already have 1 instead of 2.
1	We are already a one-car family (2 adults sharing one car).
1	We did
1	We did give up one car right before we got our bike. We went from 2 to 1 car.
1	We do not own a car, and have decided to never own. Electric longtail is the answer for us.
1	We own the cargo bike instead of a second car
1	We recently sold a car so that we now have one car for the family.
1	We sold our secondary car to buy our cargo bike
1	Weather and better public transportation
1	better public transport
1	better public transportation connections or closer/better car sharing service
1	car-sharing options in better locations for our family.
1	distance is an issue
1	dont drive so I can easily give up the plans of owning a car-not interested, costs too much
1	enhanced public transportation as a back up to the bike.
1	find a buyer
1	have done so.
1	if my wife rode more
1	live closer to everything and use rental car
1	more bicycle lanes to other cities
1	really need better accommodations in our town so that it's safer for teens to travel by bicycle
1	school drop offs would need to be walking distance from home
1	Easier access to longer-term car rentals (for a weekend, for example). Logistics of getting to/from car rental places with kids in tow are a little difficult right now.
1	Our household could get rid of one out of our two cars if my spouse was not gone for work with one vehicle for extended periods. Then a car + cargo bike would fit our needs.

Count	Response
1	My wife would have to find a job in a location where she would feel comfortable commuting by bike or transit every day.
1	I already don't have a car, but I have been thinking of supporting my friends/family in starting to think about it. These conversations and the related activities create connections and community, without which we cannot deal with the changes the next 20 years bring to our lives.
1	Availability of car share in our town would make giving up owning a car possible. We need a car to make a long trip (2 hour drive) once a week, but there is not even a rental car company in our town that is open on the weekends.
1	My wife having a job that is close enough that she could bike or use public transportation, leaving the car available when necessary.
1	easier access to a vehicle that can hold all our stuff (dogs, camping gear, etc) for rental/use for out of town trips
	Uber or something like it would need to work a bit better in the suburbs. Bart is good for connecting, but the cargo bike
1	doesn't really work with mass transit. I plan to start moving a lot of my filming to the cargo bike, but need to test putting fragile equipment on it i need the cargo bike more integrated with a smaller trailer. A lot of the bike routes have fairly narrow (and sometimes curvy) entrances and am having problems with the trailer.
1	Main use of car is long distance trips to visit family (1-7hours). Currently train/bus/plane are not very usable as they all take much longer and cost more. If this were not true we would not need a car.
1	I don't drive, at all. I have used a bicycle as sole means of transportation for the last 6 years.
1	Availability of an electric assist multi-purpose vehicle that was cost effective and at least semi-weather tight.
1	At this point I'm not willing to ride in snow with kids. Bike lanes are always filled with snow piles from plows in winter.
1	I don't think I really can. We still travel frequently to visit my in-laws and they're 70 miles away. I used my van to do a
1	lot of errands for the rental properties and thought I needed the space, but I bought a Bikes at Work trailer this summer and that solved that problem mostly.
4	Not much. We really don't drive anymore. But it's conviently for carpooling to Tahoe etc, so we're not likely going to get
1	rid of it
1	My wife would have to get into winter riding and we would have to accept that our ability to travel to relatives would become very limited.
1	We did give up a car, then all our vehicles. After nine months of auto-freedom we bought another vehicle.
1	We gave up our car when we lived in Chicago and had two cargo bikes. We decided to move and now live in an area that is not accepting of bicycles. To give up our car, we would have to see an entire attitude change of the general surrounding population and implementation of cycling infrastructure to feel comfortable biking with our children now.
1	We have foregone the purchase of a second car. In order to give up our only car, it would require an easily accessible and affordable car share service.
1	Better bike lanes to and from errands I need to run. There are some places I have to take my kids where I wouldn't risk riding the cargo bike. We would be hit by a car.
1	more weather gear and increased comfort with various conditions. possibly adding an electric assist as well.
1	Our line of work (in-home piano service) requires us to keep a car. We bike for work whenever possible, but our service
1	area is to large to allow us to give up a car altogether.
1	Better weather. I have two young kids that ride with me daily but riding in michigan weather is not always possible for us.
1	One of our vehicles is a work car, which is not really feasible for us to have as our only vehicle.
1	We don't own a car actually. We are using a car borrowed form a friend on a semi-permanent basis at the moment, but
1	bicycle and Zipcar are all we need.
1	I do not have a drivers license, by choice. Biking and walking are my ONLY forms of transportation 5 days/week. On the
	As a three person household (two parents and a baby, probably another kid in the future) we are planning on having one
1	minivan and many bikes. We don't live in a large city so we like to drive to pick up things too heavy/large for a cargo
	bike or to drive greater distances.
1	A convenient way to transport a family of 5 longer (out of town) distances. Possibly a car share or other program.
1	Need to make my cargo bike an e-zine and need more accessible public transport for time/distance emergencies.
1	Still need my Van for my contracting business, and the Volvo for foul weather, but I am about to get a Veltop for rainy conditions. My goal is to be car free by the fall.

Add-ons & Peripherals

Participants were asked how they have personalized their cargo bike with add-ons to best support their lifestyle and needs. 91 (47.9%) of the participants said that having a front basket is very important to them. 85 (44.7%) participants also said that having handle bars for their passenger was also important. Other add-ons that received over 30 responses included (in the order of importance) a footrest, a child seat, an electric motor, an accessory to tow a bike, hydraulic brakes, and having child passenger enclosure bars. 57 participants also listed other, which included cargo bags or a pannier, padded seats, and a bell.

Value	Count	Percent
lights	158	83.2%
handle bars for passenger	85	44.7%
child seat	66	34.7%
child passenger enclosure bars	30	15.8%
foot rests	69	36.3%
front basket	91	47.9%
electric motor	47	24.7%
accessory to tow a bike	43	22.6%
hydraulic brakes	32	16.8%
other	57	30.0%

Value For Yuba Owners

For Yuba owners only, most participants thought that their bike was a great value for the money with 104 (64.2%) responses. 54 (33.3%) said that the Yuma is a fair value for the money. 4 (2.5%) participants said that they are not getting the value of their bike considering what they paid for it.

When asked what additional features they might add with more expense, respondents answered as follows (by priority rank):

- 1. Integrated Lights
- 2. Nicer Components
- 3. Disc Brakes,
- 4. Lighter Frame
- 5. Hydraulic Disc Brakes
- 6. Other (better wheels, better paint, front shocks, dog carrier, integrated brakes, and SUP/surf board carrier).

Those who responded other also thought the following upgrades are important: electric assistance; better gearshifts; better bag / pannier; and an integrated lock. Many argued that at an additional \$1000, all of these items should come standard.

Furthermore, when asked what their bike cannot do but that they would like it to, the answers were diverse and often extremely personalized. They included things such as "having the ability to transport drywall." However, certain patterns emerged, such as the challenge of biking up hills, facing drag when biking in rainy or snowy conditions, not having electric support to ride longer distances or in challenging terrain, difficulty parking it in bike racks, and a lack of lights on the bike, or the inability to add additional child seats. Furthermore, several participants wish that it were easier to switch on-and-off features. For example, "removing the monkey bars and child seat to go from moving people to large items is a 10 minute job." Lastly, many participants noted the weight of the bike and how the weight causes drag in poor weather conditions and causes flat tires to occur more often that usual. Detailed responses are found in Table 15 below.

Count	Response
1	? It would be nice if it was lighter.
1	A canopy to protect Kids from rain build with poles like those in tents
1	Access more roads, it is just too unsafe in most places still.
1	Add another child seat on bike, electric assist for hills
1	Add wings to fly with.
1	Bike at night (need lights)
1	Bike everywhere traffic is to crazy
1	Can't carry my dog.
1	Carry an additional adult easier.
1	Carry both my kids safely
1	Carry drywall
1	Carry large items like plywood.
1	Carry more. The bike gets wobbly around the 500 lb mark.
1	Charge phone via USB
1	Charge the battery with solar
1	Commute. Bird watch.
1	Electrify for longer runs
1	Fit it on a train, but I just got a delivery bike from worksman to overcome this issue
1	Go grocery shopping.
1	Go on out of town trips, like camping or going up to our cabin.
1	Go on sand
1	Go up and down the many hills where we live.
1	Go up steep or long hills with a child - too heavy
1	Groceries for our family are too much on the bike without having to take the child seat off
1	Grocery shopping. Best store for us is a bit too far away and time is often an issue.
1	Hang panniers more easily while carrying passenger plus one in child seat.
2	Ι
1	I am satisfied with all that I can do with my bike.
1	I can do everything I would like with it already.
1	I can do just about anything with Xtracycle + Bike at Work trailer
1	I can't think of anything!
1	I haven't run into anything I can't do on my bike as of yet!! ≡ my Mundo!!
1	I ride in all conditions including winter, but cold wet days are still a drag.
1	I would like a bike trailer.

Table 15: Addition items might want as add-ons

Count	Response
1	I would like greater battery capacity.
1	I'd love for it to somehow fit on the front rack of the city bus.
1	In the YUBA, cant bring my dog along
1	Keep passengers dry in the rain. Easily tie gear on with wheelskirts fitted.
1	Long climbs
1	Longer bike camping trips.
1	Longer distances
1	Looking forward to hitting the farmer's market.
1	Make 200+ mile business trips, haha!
1	Many quick runs w the kids. Too much hassle to get them on/off
1	N/a, I can do just a it everything!
1	NA
1	None
1	Nope. It's pretty amazing what I can haul.
2	Nothing
1	Nothing - I can do everything I want to do on my bike.
1	Nothing really- I do what I want/need to
1	Pit the Boda boda on the busses in Tucson (It is about 2 inches too long)
1	Pull a utility cart/trailer.
1	Ride across bay bridge. Put bike on Bart. Put bike on bus.
1	Ride in the rain :-)
1	Ride in the rain without having to worry about the battery or computer components.
1	Rule the world
1	Run errands to busy parts of town.
1	Secure Bike Parking, Secure Bike Parking, Bike Parking.
1	See above. I love my bike but I have some minor requests above.
1	Some tings are just too big to accomodate on the bike.
1	Sometimes I borrow a friend's trailer to haul big/heavy items.
1	Sometimes it can be cumbersome to get into smaller bike racks.
1	Sound system and canopy for the baby box
1	Take it places more easily, like on a train
1	To tow bicycles.
1	Tour more than 30 miles a day? Weight at 120 lbs I get too tired
1	Touring, but that's only for lack of time.
1	Tow a bike
1	
1	Tow a kids bike.
1	Use it as my primary bike (frame to heavy, side loaders too large) - I own a v2.
1	We do almost everything on our bikes except ride on icy streets.
1	With the cargo trailer I can't think of anything.
1	You should look into a tandem. When my kid is older that would be nice.
1	bar is too high in the middle, can't wear baggy pants. Wish saddle bags were more convenient.
1	carry 3 kids plus 2 bikes
1	carry more adult passengers
1	carry more kids put more on the front of the bike
1	connect my trailer to go shopping even when I have my children to carry
1	electric assist
1	go 100 miles
1	go faster
1	grocery store w/ kids.
1	power assist

Count	Response
1	ride in the rain storm
1	sleep on it long distance rides
1	take the dog! better battery power
1	travel farther
1	travel longer distances (10+ miles) bike in snow/ice
1	Easily tow my daughter's bike. Go greater distances more quickly. Locking trunk so I can leave things/items on my bike safely.
1	I've been 6,000 miles through 21 states so far with a 50 lb. dog and touring gear. I dont think there's much I can't do with my bike
1	I'd like to have a long utility trailer that would allow the collection of lumber and other goods too long and heavy to be safely carried on the bicycle itself.
1	The bike does what I intended it to do when I purchased it. With a 4 yr old my intent was not to replace our single car
1	Ride downtown and back (since I live at the top of a hill, I would need my bike to be battery powered).
1	Carry an infant in his car seat, not sure if this can be enabled as there is lot "Dr Advise" regarding how young a child should be before being carried by bike.
1	Easily tow additional bikes and trailers. Take bike apart for transport ontop bike rack or for fitting on train.
	It is hard to carry large weights when pushing the bike, so I use my cargo trike for that, or a trailer. Carrying another
1	person is better on the front to facilitate easier communication, so I use a front loader cargo bike for that. Otherwise the Mundo is my most stable bike, and I really like how it feels I sit 'into' it, rather than onto it.
1	Put it on a bus rack. Or standard car rack (both because it is so big and so heavy I can't get it on the roof if my car)
1	carry lumber and long items Wider fold down racks that mount directly to the back frame to carry wide loads
	fit panniers on with the peanut child seat. i have rigged up a way to do this, but my mundo panniers are useless and sitting
1	in the garage.
1	carry our dog? Also: put my foot down at stops (I'm 5'2" and it's a struggle to balance the bike sometimes.)
1	Switch accessories, for example removing the monkey bars and child seat to go from moving people to large items is a 10 minute job. Steep hills are not possible with two kids or full load.
1	trips between 5 to 14 miles are not very efficient. (i.e. mass transit is good over 15 miles distances, and cargo & hybrid under 3 miles)
1	Different gear ratios. I need the low gears to pull sometimes but it takes very little to out pedal the gears and have to just
	coast. Otherwise I can do mostly what I would like, groceries, laundry and side trips to any other type of store.
1	Lights (tail and turn), remote center stand, get a stepover style bike to mate to the Xtracycle frame extension. I do use it for going to the dry cleaners, but having a detachable rod for hanging cargo might be a neat and easy add on.
1	(Though maybe just folks in DC need that sort of extra, certainly compared to casual West Coasters.) A special soft-sided
-	cooler that attached to the back might be a nice add-on, for picnics, grilling in the park, softball games with beer, etc.
1	I would love my 8 year old on the elboda to be able to sleep on long hauls and be covered from the elements, thats not
1	going to happen, making a good excuse to buy a bullitt when not using the boda
1	Go 30 miles round trip with two girls under 4years old. Probably would need fairing for the front daughter. E assist for
1	me
	Leave things with the bike so I'm not like hobo any time to into a store - especially if it's the second stop Given that I have two kids on the bike, one with the foot rest and one with the bike seat, it would nice to also have a bag
1	back there for carrying groceries. However, none of the available bags fit.
1	Transport kids in wet/extremely cold weather. It's hard to imagine an effective weather cover for the Mundo, so this is possibly not achievable, but it would be very useful.
1	1. Travel over rough terrain comfortably. (suspension) 2. Carry and unload loose materials. (dump bed) 3. Carry persons or cargo in weather-tight environment. (removable enclosure)
1	It would be great to have an even more powerful electric-assist battery and motor for round trips 40 to 50 miles. Other than that it's absolutely crazy what we do with it.
1	Ride longer distances. I would really like to add an electric motor to my current Yuba to facilitate more trips.
1	Ride in all weather. Feel comfortable on all roads some do not have bike lanes, or even shoulders.
1	If I can't do it on my cargo bike, it's more likely a result of the inadequate infrastructure in my community rather than the bike itself. For instance, I would like to be able to go to the hardware store and could easily contrive a way to carry home
1	any number of products from there but the route is not bicycle friendly no shoulders, 55 mph, heavy traffic.
1	stop sweating, don't mind arriving out of breath, but can't always handle the damp salty clothes
	I would like it to be easier to haul things while also carrying passengers. And I'm super tempted to turn it into a fat bike.
1	At least for winter.
1	Since distance (trips greater than approx 6 miles one way) is the only limiting factor, we pretty much do everything we

Count	
	can by bike!
1	Nothing. I use either my cargo or traditional bike for nearly everything but long distances with my young child.
1	Protection from the elements, solar panel charger, integrated Yuba trailer, more paint color options, bigger mud flaps
1	I wish the bike weren't so heavy and didn't get so many flats and wish the electric wasn't so inconsistent.
1	I would like to be able to travel longer distances with my bike, but I would need to get an electric assist to deal with large hills and mountain inclines around here in Washington.
1	It would be nice to have a box bike for some applications, such as hauling large, heavy objects. I would have biked more when my child was a baby if I'd had something I could carry her car seat in as well (I didn't start biking with her until she was a year old)
1	There isn't much we can't do except for the monthly trip to the burbs for the things we can't get in the city.
1	My big barrier is distance. Secondary: enclosure for carrying whiney kids in the rain/cold/snow. We had some ROUGH
1	days this winter when the temps dropped and I couldn't get them bundled enough.
1	I can't think of anything for my Boda Boda, but if it were much larger like my wifes Madsen, I would like to be able to
•	take it on Bay Area Rapid Transit. Much larger than a Boda and bikes dont fit in elevators.
1	I would like a deck that enables me to install a child seat that I can quickly take on/off like the Yepp system. I have kids aged 1, 3, and 6 so sometimes I want a bare deck (toting 6 year old + groceries or other cargo) and sometimes I need the child seat with the seat belt and harness (1 year old). I use my bike daily and it isn't practical to take a Peanut Shell on/off so frequently. Instead, I have a Yepp on my old hybrid bike. I'd much rather simplify to just my Yuba, but don't have the versatility I need on a daily basis. For toting kids and also to make my bike more friendly in winter weather, I think the IGH makes more sense than the derailleur. I have one (but had it installed myself).
1	Go everywhere, but just a little faster than I can go now. My bike goes about 12-14 mph top speed. I think if it had a different set up it could go faster.
1	I don't ride much at night because I don't have lights. I don't ride more than ~7 miles each way per trip because it takes too long Occasionally I have to buy something that just won't fit on the bike
1	Riding on water and snow - it would be nice to have some adapters to attach some floating pontons or kind of skis.
1	Load it on the bus, train, etc for multi modality. Sit more upright on the Yuba, like my bakfiets.
	Would love to be able to bike into SF over the Bay Bridge. Wait, even more important is a SAFE and direct Bay Trail
1	connection between Buchanan and Gilman in Berkeley. If both, could bike from Richmond to SF without cars! Note also planned new UC Berkeley 5.4 million-square-foot bayside campus for Richmond. A great time to expand that trail!

Other Comments / Responses

When given the opportunity to provide additional information or thoughts, participants provided feedback such as praise about their Yuba bike, further suggestions on how to improve their bike, and pleas for better bike-friendly infrastructure in their area so that they can bike more often. Responses are provided in the table that follows.

Table 16: Open Ended Comments

Count	Desponse
Count	Response Boda boda has been an awesome addition to our bike fleet!
1	Hoping to purchase a cargo bike and go back to bicycle commuting within six months
1	I LOVE my Yuba and wish I could ride it everywhere.
1	I am currently a stay at home mom with kids in school.
1	I bought the mundo for short food shopping and for short errands around my neighbor.
1	I have dogs instead of children, I would like to take them with me in my bicycle to the park
1	I live in Paris France
1	I love my Yuba and have helped convert several other families. :)
1	I love my xtracycle. Great cargo bike.
1	I own multiple bicycles and use them according to the task or journey at hand.
1	I skipped a page on your survey accidentally because there was no back button.
1	I wish yuba came with dynamo lights built in
1	
1	I would bike more if there were more protected bike lanes. It's that simple!
1	I'm Form germany
1	Integrated high end lighting and internal shifting
1	Keep producing and marketing these awesome bikes.
1	More segregated bike paths = more riding
1	Nice job on the bikes!
1	Norfolk doesn't have any bike lanes, and it needs them!
1	Please include us Canadians! We don't have zipcodes but we ride cargo bikes, too.
1	Protected bike infrastructure is a hugely important factor in choosing when/where to ride
1	Safety
1	They need to have longer range options. The urban commuter effort is a great solution
1	Typo on previous page. Lake should be like.
1	Unable to enter zip code because we're in Canada!
1	Watch out for Mike and Bixby slowly making their way to California.
1	Whether the vehicle driven is for work purposes
1	Winter.
1	d.
1	love our cargo bike, it has improved our quality of life greatly!!!
2	no
1	survey not suitable for international participants
1	traffic calming is most important
1	zip code not applicable im in sydney australia
1	Don't forget to consider the joy from kids who are hauled on the bike and the positive impact seeing a family on a bike together has on others

Count	Response
1	I think i've been very clear that I regret spending over 2000 dollars (maybe 2500 I forget) on a bike i never use.
	I would love to make the switch to a cargo bike. we just recently found they even existed and are very excited to
1	purchase. we own two cars and seriously feel we can do with just one if we bought a cargo. my biggest concern is drivers
1	lack of respect/courtesy for bicyclist and no general knowledge of bicyclist laws and rights, hence lack of courtesy and
	respect. second concern, bike routes to groceries stores, clothing store, and the kids schools.
1	We are moving closer to our work so that we can bike or walk to work and drop kids off at their school. Plan to primarily
	use cargo bike or public transport to get around in the fall Like I said above, a smaller front tire w/ a deeper bread basket would be great. Also, the current bread basket interferes
1	with the cables. This has caused me problems multiple times. Additionally, an integrated hook for a trailer would be nice.
1	Finally, an integrated front light should be an option.
	Parking/storage of the larger-format cargo bike is huge factor in considering residential location. Giving up a car and
	switching to a cargo bike saves me greatly in transportation costs, and that figures into my overall budgetary thinking
1	when considering changes of address for home or work. This issue, and many others (distances from home-to-school-to-
1	work, for example) should figure into civic strategies for changing mode-split, planning for density and transit
	configuration, parks, schools, etc. Intentionally switching the public from the private auto to active transport forms has a
	wide and tightly interconnected array of considerations and requirements.
1	My Yuba has become my shopping bike. Used every weekend for groceries, plus occasional extras. Office bike park
-	access is up stairs and around corners - too hard for the Yuba, so use traditional bike.
1	We generally transport 2 kids to & from 2 different schools each day. We also grocery shop, go to parks/beach, soccer, dance etc. We have one car & use it when it's super rainy & kids are sick. I wish the bike was lighter. Love our bike.
	Ownership of a cargo bike in the car-centric area that we live in allows us to mainly use it to shuttle our kids to and from
1	their school to minimize car congestion at the school and get exercise. We rarely use the bike for errands because it
-	simply takes too long. However, we do utilize it recreationally on the weekends or evenings to bike with the kids.
1	Mayor Bloomberg's fantastic bike lanes are a huge reason I ride the cargo bike. I would use the bike for more and other
1	trips if there were even more safe bike lanes.
	This survey does not convey purpose of Mundo for me or how the bike is used and/or how it has changed my life. I was
	using a car to make all my weekend trips/errands because my traditional road bike was not practical. My daughter had
	outgrown our Burly trailer and I had no way to take her anywhere. Now I do almost all errands on the weekends by bike. I live 20 miles from work and cannot bike commute daily; it simply takes too long to ride. I bike commute once per week
1	but the Mundo is not practical for such a long commute. It is too big, heavy and slow. I didn't need the Mundo's
	capabilities to get a good commuter bike. Even if I lived closer to work I would use the traditional bike to commute
	(unless it was under 2 miles). I rarely travel outside a 3 mile radius on the weekends and that's where the Mundo is great.
	But it's only on weekends that I use it.
	The cargo bike is great, super handy for errands, carrying frisbee or softball gear to and from work, or going out on date
1	night with my wife riding along. The folks at Yuba are quite helpful and friendly, and has enriched my owning the bike.
	Also, it gets admiration and exclamatory comments everywhere I go on it. And, I'm starting to see more of them around
	town. Keep up the evangelization!
1	At some point I would like to own a cargo bike on a given week, I haul my son's cello in my bike trailer or groceries. My family is a bike-focused one and we'll continue to be so.
	I'd be interested to see cargo bike parking options discussed and developed, specifically wider platform style: Bullitt,
1	Cetme, etc.
1	The issue for not riding more is weather and change of clothes when I need a suit for work. Also my 3.5 year old loves
1	traveling by bike together.
1	I had the Mundo V1, I feel like it was way more stable than the V3, as soon as you get a certain load it goes shaking.
	I live in Canada I want a light weight small packing cover for putting over the bike when locked up on the street. I think it
	would reduce theft. A cargo bike is not going to make me give up a car that i have already paid for, esp with a family. It
1	does reduce the trips i make as a single occupant of the car. It will also hopefully keep the car that i have running longer
1	and reduce the need to replace it. That would have been an interesting part of the survey. I don't feel "bad" driving when I have 3 kids in the car and esp if I am carpooling and keeping another family car off the road. I do feel "bad" when I am
	driving to do errands by myself or with only 1 kid, because I know I could easily do it with my cargo bike. That is the
	difference for me with a cargo bike. I don't know if that comes through in the survey.
4	Getting families on bikes is all about demonstrating the safety of cycling, and/or the dangers of driving. This is a PR
1	problem, not an infrastructure problem (in the DC area)
1	closed bike trails or extra wide bike lanes help a great deal in encouraging bike commuting. I have that in my home town
1	but not connecting to the town where I work. This is a major hurdle for me.
	My only complaint is that I did not get a cargo bike years ago instead of a road bike, instead of a mountain bike. I
1	would have gotten my exercise hauling extra bike weight and things (both in terms of weather preparation and activities),
	although maybe a little slower (but fast enough to piss-off other riders who either can't catch me or can't get me off of

Count	1
	their rear wheel.)
1	The cargo bike has helped me to get my child around without using the car so much. It is deeply important to me that he grow up on a bicycle, and not in a car.
1	bicycle use will increase as the Millennial generation increases influence and Caltrans engineers and sr. mgmt friggin' die!
	In Seattle or other hilly places, when you add up the weight of the driver, bike and a passenger (child) or cargo, v-brakes
1	are not safe. For someone who was not a bike expert - I would have liked more info on this while I was purchasing the bike. Now I have to have a bunch of fairly new components replaced to accommodate disc brakes.
1	I like the idea of bike commuting, however without some form of supported infrastructure that supports safe riding pathways any tangible progress is limited in number or by geographic location. There is the ever increasing statistic of accidents due to distracted drivers. This has indirectly resulted in the increase of hazard risk associated with bicycle riding. Mitigate the hazard associated bicycle riding, increased ridership will naturally follow.
1	My cargo bike is used for recreation and for work. Because of time I drive my truck to the job site and use my cargo bike from there. I use it to haul land surveying equipment on site. I also use it for recreation, these trips tend to be longer, ~20-30 miles. The bike has proven to be a great tool and saves me a lot on gas, wear and tear, plus it can go places that the
	truck cannot go! I am a serious road cyclist and have been riding all of my life.
1	Would prefer frequency expressed in terms of weekly trips for more accuracy since it seemed that whole numbers were expected
1	I am saving up to buy a Yuba so that I can do more of my shopping trips by bicycle. Right now I max out at the equivalent of 3 filled grocery bags and I want to handle 5 or 6 bags worth.
	I love riding my cargo bike, and so does my 6-year-old and her friends. I even have a Boombotix speaker mounted so we
1	can have tunes on our ride. Random people frequently compliment us on our transportation mode or give us the thumbs up. Cargo biking isn't just a mode choice - it's a way of life!
	I love the Yuba Mundo frameset. I have had to upgrade many of the components. Some of the original components are
1	extremely subpar. The Yuba bags are cheaply made and do not stand up to even moderate use. I purchased a Boda Boda for my wife and it had several serious flaws.
1	Nope!! Love the fact that Cargo bikes are drawing so much interest. Maybe one day they contribute to a drop in Obesity and an increase in breathable AIR!!
1	Due to the large amount of Xtracycle compatible appliances it may make sense to have compatibility, but not to the cost of weekening the frame. Otherwise the Mundo is superb, I would not change things around.
1	I feel that motorized bikes are and will bring more people to bikes than anything else, followed closely by cargo bikes.
1	No kids yet, but begin foster parenting next month and getting a cargo bike is a strong likely hood dependent on the age and needs of the child (children).
1	I live in a small town (about 5,500 people) and drive to work in a much, much smaller town (about 350 people). Thank you for making cargo bicycles.
1	I thought you might be looking for ways our physical route changed due to cargo bike usage. A lighter bike, sans cargo or children may be taken on heavier trafficked roads or up more hills. The cargo bike is more often taken on the scenic route and avoids four lanes and other traffic sensitive spaces. The survey was also tailored to Yubas where as the definition of a cargo bike included other models. A little misleading regardless of who the survey is sponsored by. Also, you may need a spell checker or editor. Some questions were poorly written. Given we listed our zip and cross streets it doesn't feel very anonymous. :) Have fun folks!
1	Love my bike and as an urban planning professor at KU I am very glad to see Cal Poly engaged in this kind of research!
1	Transporting my vehicle to (use area), when further than cycling distance is one of my biggest issues. I do have a custom rack but it is still difficult to load and unload.
1	We want to raise our children with respect for the earth and their bodies. Not to mention spending more time together. Our cargo bike is helping us do that.
	A lot of the questions were difficult for me to answer b/c my circumstances have changed dramatically since when I initially purchased my Yuba in 2008. At that time, I wanted something I could use to transport a child to school on my way to work who was too big for a trailer, but too young for the hills in the area. Also, wanted a grocery getter. For these purposes, the Yuba served me well for about a year. However, when we moved far away from my work, I could no longer bike to work, and the Yuba became used primarily as a grocery getter and only occasionally for transporting my daughter and other larger items. Now I work again nearby, but no longer need to carry my daughter to school, so I primarily use a traditional bike and even find myself using the Yuba less as a grocery getter since my trad bike has a full set of panniers and I can attach a trailer if necessary. I find this less cumbersome than having to pull out the Yuba b/c of its weight and size. Still use the Yuba, though, for some occasional transport of large items, groceries and people. Not sure why this
1	Survey privileges Yuba over other cargo bike brands. Both household members ride European city bikes, with sturdy racks and large panniers - so very nearly a cargo bike minus the longer wheelbase. We ride our bikes 3 - 5 times per week, but do not commute due to traffic safety. Instead, we

Coun	1
	ride quiet streets for fitness and run shopping errands locally on weekends.
	A cage like the Monkey Bars on a bike that could be put on public transit would really increase the range and usability of
1	the bike. For me, I certainly don't need the weight capacity that the Mundo offers. I would have bought a Boda Boda if ti had offered Monkey Bars.
1	I use Uber or Lyft as well as Mass Transit and my feet as well as my Yuba Mundo for everyday city living
1	One serious area for improvement on the bikes is a better way to get the front wheel off in the even of a flat. It is a very
1	cumbersome set up and requires high skill, concentration and patience
1	The two things I haven't been able to get out of my head since riding my cargo bike. "The politics of possibility" & "Our problem was not, and is not, a lack of growth. Our problem is 60 years of unproductive growth — growth that has buried us in financial liabilities. The American pattern of development does not create real wealth. It creates the illusion of wealth. Today we are in the process of seeing that illusion destroyed, and with it the prosperity we have come to take for granted." - Charles Marohn, Strong Towns
	Weight load really effects what form of transport I take. Grocery shopping and getting water with the girls is tricky. I
1	have to use the car for heavy loads. If there were a better/safer route to our school of choice I'd take the yuba and my daughter would be in preschool. As it is now, I home school her.
1	Your survey seemed to assume that my cargo bike purchase was recent. It was over 6 years ago, when I lived in a
1	different town and had no kids. Of course my commute patterns changed!
1	How it's too difficult to put a cargo bike on transit, but certain bike/trailer combinations are possible.
1	The single biggest obstacle to my driving somewhere instead of riding is the lack of bicycle-friendly streets on route.
1	Redmond calls itself the "bicycle capital", but there are no protected lanes and seemingly no education about commuter bicycling. Spandex bike racers are all anyone sees, and they are either revered or hated, and there's nothing in between.
1	How many more people would ride if the bike lanes were safer and there was more infrastructure for bikes (air, bike
-	parking, etc.)
1	I forgot to include this elsewhere, but: I have built my own weather canopy for my BionX Mundo. It has been invaluable at keeping us on the road in the winter and in the rain. It would be great if Yuba could partner with another manufacturer to design and sell a custom weather canopy that fits over the whole rear deck of the Mundo.
1	I would ride more if we had more safer bike lanes. I would love it if there were some kind of weather shield for the Yuba.
	I've experience with four cargo bikes, I call the short tail Boda Boda a "cargo-fashion" bike. This is due to the fact I had
1	to fabricate a way to attach a water-bottle carrier to the bike and the lower quality components. The gearing sucks too. There is not enough spread, Xtracycle's Radish model has great gear ratios - enough for (flat) Tucson. The Boda Boda could use both a lower and higher gear, depending on the load (or lack thereof) carried. I ride my Boda boda most due to the short wheel base and the light system I added, but if I could only have one cargo bike it would be the Xtracycle Radish (no longer owned) or my Trek950 Xtracycle (still owned). That said, cargo bikes (in general) are the best
	improvement in transportation ever. My commute is only 4.4 miles, but I leave for work pre dawnmy daily "load-out" of tools, lunch, etc is often in excess
1	of 50 lbs & bulky,my Electra "Delivery" can easily make the trip, but it's not really designed for THAT use daily. Our roads in south Florida are very fast. And many cyclists & walkers have been hit.
	We recently purchased a second electric assist cargo bike for my wife. It's her third bike, along with a road bike and a
1	breezer city bike. She instantly became a die hard commuter, traveling to work each day with one of our dogs in the breadbasket. The change for me has been wonderful, we barely touch our car, and we're getting out more often and have
	more fun when out.
	One of the larger barriers I've found to people using bicycles as a primary mode of transportation is safety. The availability of traffic free cycle lanes is probably the biggest barrier to my colleagues considering using a bicycle for
1	transit regardless of whether it's a cargo bike or not. The primary purpose we bought our cargo bike for was to transport our children to school with out having to use our car or public transit. It was also important that we could both use the bike with simple adjustments (saddle height) as we do have the space/funds to buy two bikes. We bought the cheapest cargo bike we could afford as we were not sure it would work for us. One year in we're convinced it was the right
	decision but in hindsight we would have: Liked a way to trial this mode of transit. Spent more money on the bike with better quality components as the brakes need constant adjustment and other components have shorter longevity and will need replacing soon. That said owning the cargo bike has been a positive experience.
	Survey seems a little bit narrow, a number of the questions I was not able to give my "natural" response and had to
1	choose "best fit." I might not fit the target that well since I already bike for nearly all of my trips in all weather. Also, I
I	think you are missing some of the reasons people skip biking. A secure lockup at work/school, place to change/shower,
	weather, safety of streets, attitude of local drivers, all seem like large issues for people I've tried to get riding.
1	Love the bike, if you have kids you NEED the front basket for quick grab n go trips. Every bike needs lights, mudguards, a built in lock, to be truly ready to go. And a bell of course.
1	For my daily commute to and from work, I reluctantly drive because it is far away. Whenever doing things in town on my own time (running errands, visiting friends, extracurricular meetings), I ride my bike and occasionally take public transit.
	own time (running enances, visiting menus, extracumental meetings), i nue my bike and occasionary take public transit.

Count	Response
1	I love riding my Yuba for hauling stuff, shopping, and fun, but it would be overkill for riding to work, and there is not sufficient parking space indoors at work for a large bike.
1	I live in a mid-sized community in British Columbia, Canada. The climate here is temperate and the terrain is mostly very flat (valley floor), making this an ideal place to ride a bicycleeven a heavy oneyear round.
1	Lots of these questions were odd or incoherent, and not quite relevant to my situation. I answered as best I could!
	The scenarios did not mention weather, which is likely the main reason (t-storms) that would prevent me from riding.
1	Also, I've found that the least expected change from getting the bike is that I ride more during the weekend and that we do more family trips by bike.
1	Yuba, Please make the v5 Yuba with a Vertical dropout, and a standard diameter axle so we have a better chance of repairing a flat on the road.
	Security for the more expensive electric bikes is a bit iffy at a lot of spots(bike is as expensive as a motorcycle yet is a lot lower weight/easier to steal). my fixed gear bike is fine on security, but i really need the electric large cargo bike to fully
1	move off using the car. I don't have a large cargo bike like the el mundo yet, using hacked out approaches now where my back of my feet hit larger cargo's - so i need to move to the cargo bikes with the larger back end.
1	we love our yuba bodaboda el our biggest obstacle lately is the batterywanting to take it out but isn't charged, with 2 small kids in traffic, the battery really is imperative. better battery power w the ability to plug in overnight without having
	to unplug would help. One deterrent to taking more side trips (for groceries, etc) besides going to work and school is fear of theft. I have been
1	hesitant to lock up my cargo bike in a non-secure location, like right out on the street, for extended periods of time. I bought a minivan to solving bike parking problems and to postpone buying an electric motor. I rarely park the minivan
	at home. Instead, I park it near work (and a shopping mall). I lock my Yuba Mundo inside the van. When I go shopping, I
1	drive the last mile to the store to avoid the inconvenience of having to lock up the bike. I will probably put a StokeMonkey electric motor on the Yuba Mundo. Then I will just use the minivan about 10 percent of the time for
	occasional family trips or if I am in an extreme hurry. Currently i still use the minivan for more than 50% of my
	transportation miles.
	I think the range thing is big. There are places that I would rarely go with my son (again, we don't like to drive) if I didn't
1	have the cargobike and especially with the electric-assist. In fact, we would have never sent him to the school he is going
1	to unless we had the ElMundo.
1	Reasonable pricing on eHub with adequate power. The cost for this 350watt motor is way too high to take seriously The biggest issue of a commuting and cargo bike is to have proper lanes and bike paths Instead of fighting traffic,
1	inhaling fumes and riding small kids next to speeding vehicles. This is what makes the option les viable. Bike paths connecting to downtown like the one in Sonoma is the way to go
1	I love biking! Whenever I can carve out a safe route that does not expose us to the whimsy of car drivers, we bike. Biking
1	makes me happy.
1	I would definitely increase trips by bike if additional bike infrastructure OR motorist education on cyclists was done. Motorists are the only reason I don't bike on days with less than ideal weather.
1	The front carrier looks nice but the bicycle handles very poorly (unstable steering) when the carrier is loaded with anything significant, e.g. more than 10-20 pounds.
1	My cargo bike experience has been great ,I can do much more than I ever would have imagined. I try to tell people this and they just don't get it, may be renting cargo bikes out to the public would get some people interested ,I really don't know how we can change peoples perception of cyclists and cargo bikes, watching utube vidieos of people sweeden with
1	their bacfiets bikes is inspiring to me, they have it down, we seem to be just catching on.
1	Electric assist bikes and dedicated bike lanes are the way to get a much broader group of commuters out of cars. When I am riding with my load, 80 to 120 lbs I can't stop without disc breaks. Although the yuba looks great the gearing
1	looks bad for hills. So I am riding the fisher transport, it can't stand up by itself. This is irritating. Prior to it I was riding the kona minute. I wish your gearing was more like that. In addition, the girl with the flower coffee and baguette campaign is bad, you should market cargo bikes to cyclist guys with young kids and cruiser riding wives. It would get
	them family time and a decent cycling work out. We do it all on the bike. That includes me taking 3 kids and all the gear bike camping with just the yuba and a chariot
1	trailer.
1	I am a fair weather cyclist. I try to ride my bike to work as much as possible. It it rains or has a chance of rain over 60%, I'll drive. Between 25-60% chance of rain, I'll ride my folding bike. I work early hours sometimes and if I have to be at work prior to 0500, I'll drive (occurs ~2 times per month). If I have side trips I will drive. My current bicycles do not have
1	capacity to carry large objects. If I have the day off during the week and the kids are in school, I'll take them to school in a bike trailer.
1	I have had my cargo bike less than a year and am still working on changing my habits and getting comfortable biking in the city. I hope to continue increasing my biking time and decreasing my driving.