Categorizing Cyclists: What Do We Know? *Insights from Portland, OR*

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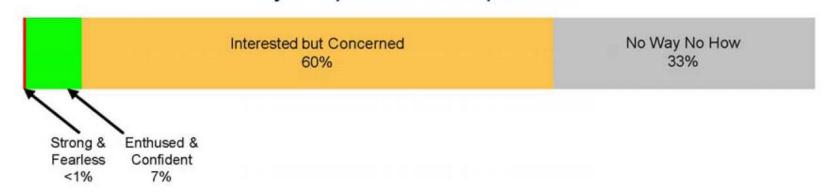




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Portland's "Four Types"

Four Types of Transportation Cyclists in Portland By Proportion of Population



Who are they?

- Strong & Fearless
 - "will ride in Portland regardless of roadway conditions"
- Enthused & Confident
 - "comfortable sharing the roadway with automotive traffic, but they prefer to do so operating on their own facilities"
 - "They appreciate bicycle lanes and bicycle boulevards"
 - "attracted to cycling in Portland by...its bicycle network and supporting infrastructure"
 - About 60% of this group may now ride regularly for transportation

Who are they?

Interested but Concerned

"curious about bicycling...They like riding a bicycle"

"But, they are afraid to ride."

"Very few of these people regularly ride bicycles"

No Way No How

"not interested in bicycling at all, for reasons of topography, inability, or simply a complete and utter lack of interest."

"The separation between these four broad groups is not generally clear-cut...likely quite a bit of blurring..."

Where did they come from?

Four Types of Cyclists Roger Celler, Bicycle Coordinator Portland Office of Transportation Despite all the considerable advances Portland and the region have made in facilitating Despite all the considerable advances Portland and the region have made in facilitating bicycling-concerns about the safety of bicycling still loom large. Riding a bicycle should be safety of bicycling still loom large. Riding a bicycle should be safety of bicycling still loom large. bicycling, concerns about the safety of bicycling still loom large. Riding a bicycle sho not require bravery. Yet, all too often, that is the perception among cyclists and non-contrate atthe NA marrow should have to be "brave" to ride a bicycle: unformately. not require bravery. Yet, all too often, that is the perception among cyclists and non-cyclists alike. No person should have to be "brave" to ride a bicycle, unfortunately, this is cyclists alike. No person should have to be "brave" to ride a bicycle, unfortunately, this a sentiment commonly expressed to those who regularly ride bicycles by those who do not There are organization in conductor industrial tread nations around the strength with a bid a sentiment commonly expressed to those who regularly ride bicycles by those who do not. There are many cities in modern, industrialized nations around the world with a high not. There are many cities in modern, industrialized nations around the world will be bucycle mode split. They have achieved these high levels of bicycle use through adherence to various evolute recommence and exactions. First one shine that bicycle mode split. They have achieved these high levels of bicycle use through adherence to various cycling promoting policies and practices. But, one thing they share in common is that have collaborately appropriately approp adherence to various cycling promoting policies and practices. But, one thing they in common is they have substantially removed the element of fear associated with incommon is they have substantially removed the element of the common and the common of th in common is they have substantially removed the element of fear associated with bicycling in an urban environment. They have created transportation systems in which the substantial and associated section of a content of the substantial and associated section of a content of the substantial section of a bicycling in an urban environment. They have created transportation systems in which bicycling is often the most logical, enjoyable and attainable choice for tups of a certain teners for a wride create-mid not the environment for the environment for the environment for the environment of their encestance. bicycling is often the most logical, enjoyable and attainable choice for trips of a certain length for a wide swaff—if not the majority—of their populace. For residents of these controls are a supplied to the majority—of their populace. length for a wide swath—if not the majority—of their populace. For residents of these cities, concern about personal safety associated with bicycling is rarely a consideration. and certainly not to the levels we experience here. In these "fearless" cities septragenarians are able to ride alongside seven-year-olds safely, comfortably, and with confidence throughout the breadth of the cities. Medicine birrortion a more surfacement septuagenarians are able to ride alongside seven-year-olds safely, comfortably, and with confidence throughout the breadth of the cities. Making bicycling a more widespread to the cities of the citi confidence throughout the breadth of the cities. Making bicycling a more widespread and mainstream means of transportation in Portland will require substantially addressing and mainstream means after the concerns about personal earlier. Describing the four general categories of transportation cyclists in Portland and their Describing the four general categories of transportation cyclists in Portland and their differing needs best precedes a discussion of buleway treatments. For lack of better terminal new Portlandare can be placed into one of the four futures according to the property of the four futures according to the control of the four futures according to the future futures. differing needs best precedes a discussion of bikeway treatments. For lack of better terminology, Portlanders can be placed into one of the four following groups based on their relationship to biscola temperatures. The Stream and the Earthean William concerns about personal safety. terminology. Portlanders can be placed into one of the four following groups based on their relationship to bicycle transportation. "The Strong and the Fearless." "The Enthured and the Confident." "The Interested but Concerned." The fourth group are non-cidents. Called the "No Wav No How" events Survey after survey and poll after poll has found again and again that the number one reason records do not ride bicucles to because they are a finit to be in the conductor one. Sittively after survey and poll after poll has found again and again that the number one teason people do not ride bicycles is because they are afraid to be in the roadway on a bicycle of the property of th Enthused and the Confident, "The Interester riders, called the "No Way No How" group. reason people do not ride bicycles is because they are afraid to be in the roadway on; in bicycle. They are generally not afraid of other cyclists, or pedestrians, or of injuring themselves in a birrycle-melt erach. When Riding a bicycle should not require bravery. Yet, all too often, themselves in a bicycle-only crash. When that is the perception among they say they are "afraid" it is a fear of cyclists and non-cyclists alike. people driving automobiles. This has been documented and reported in transportation literature from studies, In The Netherlands and Germany, 50% of all trips made by people 75 and older is either by walking or bicycling. In The Netherlands, 25% of all trips made by such septuagenerians are by bicycle. surveys and conversations across the US, bicycle. ² This typology is for using the bicycle for transportation, only. People in all these groups— This typology is for using the bicycle for transportation, only. People in all these groups— This categorization. This categorization groups—may bicycle for recreation. This categorization groups—may bicycle for recreation. This categorization and the second groups—may bicycle for recreation and the second groups—may bicycle for transportation, only people in all these groups— This categorization are second groups—may bicycle for recreation and the second grou

This Research

Objectives

- Validate the Four Types or develop an alternative way of categorizing Portland's cyclists and noncyclists
- Identify how to increase cycling for transportation, i.e. what is the market and what do they want?
- Funding
 - OTREC
 - City of Portland

Survey Methodology

- Random phone survey of adults in the Portland,
 OR metropolitan area
- Sample included both land-line and mobile phone numbers
- July 19 August 10, 2011
- Response rates:
 - 19.5% of eligible numbers
 - 35.0% of resolved numbers
- Data were weighted by sex and age to reflect to population, using 2010 Census

Overview of Process

- Step 1: Level of comfort
 - Based upon stated level of comfort bicycling on non-residential streets with and without bike lanes
- Step 2: Interest in bicycling more
- Step 3: Current cycling behavior
 - Utilitarian/Transportation
 - Recreation-only cycling
 - Not cycling

Step 1: Level of Comfort

I'm going to read a list of places you could ride a bike. For each place, please tell me how comfortable you would feel biking there using a scale of 1 to 4, with 1 meaning you would be "very uncomfortable," and 4 meaning you would be "very comfortable." These are hypothetical scenarios.

A path or trail separate from the street.

Step 1: Level of Comfort

...a two-lane neighborhood commercial shopping street with traffic speeds of 25-30 miles per hour, on-street car parking, and no bike lane.

What if a striped bike lane was added?

...a major urban or suburban street with four lanes, onstreet parking, traffic speeds of 30-35 miles per hour, and no bike lane.

What if a striped bike lane was added?

...a major street with two lanes in each direction, a center divider, on-street parking, traffic speeds of 35-40 miles per hour, and no bike lane.

What if a striped bike lane was added?

Step 1: Level of Comfort

Level of Comfort	Category	Possible Type
Average ≥ 3.5 for non- residential street scenarios without bike lanes	Very comfortable on non-residential streets without bike lanes	Strong and Fearless
Average ≥ 3.5 for non- residential street scenarios with bike lanes	Very comfortable on non-residential streets with bike lanes	Enthused and Confident
Average < 3.5 for non- residential street scenarios with bike lanes	Not very comfortable on non-residential streets with bike lanes	Interested but Concerned
Average ≤ 1.5 on paths or trails separate from the street	Very uncomfortable bicycling	Now Way No How
Physically unable to ride a bicycle or don't know how to ride a bicycle	Unable/Don't know	Now Way No How

Please tell me if you strongly disagree, somewhat disagree, somewhat agree, or strongly agree.

...I would like to travel by bike more than I do now.

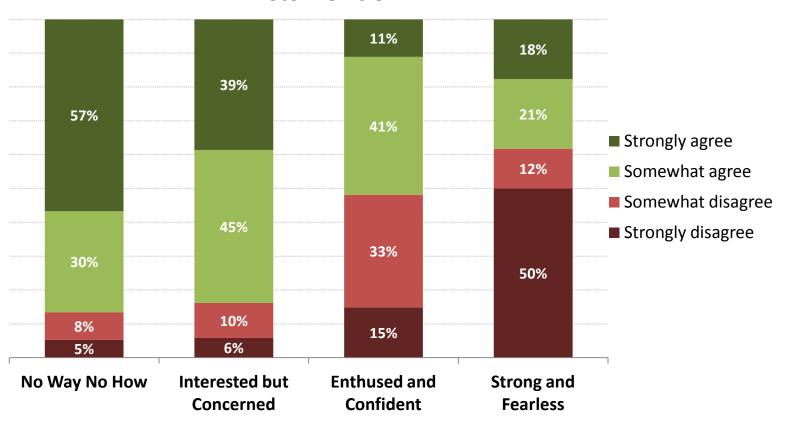
Comfort Category	I would like to travel by bike more than I do now.	Possible Type
Very comfortable on non- residential streets without bike lanes		Strong and Fearless
Very comfortable on non- residential streets with bike lanes		Enthused and Confident
Not very comfortable on non-residential streets with bike lanes	Agreed strongly or somewhat	Interested but Concerned
	Disagreed strongly or somewhat	Now Way No How
Very uncomfortable bicycling		Now Way No How
Unable/Don't know		Now Way No How

 But, some people who are uncomfortable and are not interested in cycling more have bicycled for transportation in the past 30 days

Comfort Category	I would like to travel by bike more than I do now.	Final Type
Very comfortable on non- residential streets without bike lanes	Either	Strong and Fearless
Very comfortable on non- residential streets with bike lanes	Either	Enthused and Confident
Not very comfortable on non-residential streets with bike lanes	Agreed strongly or somewhat	Interested but Concerned
	Disagreed and cycled for transportation in past 30 days	Interested but Concerned
	Disagreed and did not cycle for transportation in past 30 days	Now Way No How

Categories are consistent with level of concern about motor vehicles

If or when I ride a bike, I'm concerned about being hit by a motor vehicle



Distribution of Adults

Туре	Description	City of Portland	Rest of region	All
Strong & Fearless	Very comfortable without bike lanes	6%	2%	4%
Enthused & Confident	Very comfortable with bike lanes	9%	9%	9%
Interested but Concerned	Not very comfortable, interested in biking more Not very comfortable, currently cycling for transportation but not interested in biking more	60%	53%	56%
No Way No How	Physically unable or don't know Very uncomfortable on paths Not very comfortable, not interested, not cycling for transportation	25%	37%	31%

Notes: May not total 100% due to rounding. Data are weighted by sex & age to reflect population

Step 3: Current Behavior

Over the past month, about how many days did you ride a bike?

Of those ___ days, about how many days did you ride a bike to work or school?

Of those ___ days, about how many days did you ride a bike to shop, dine out, run errands, visit people, go to a movie, or similar activities?

In a typical summer month, how many days do you ride a bicycle for commuting or other transportation?

In a typical winter month, how many days do you ride a bicycle for commuting or other transportation?

Step 3: Current Behavior

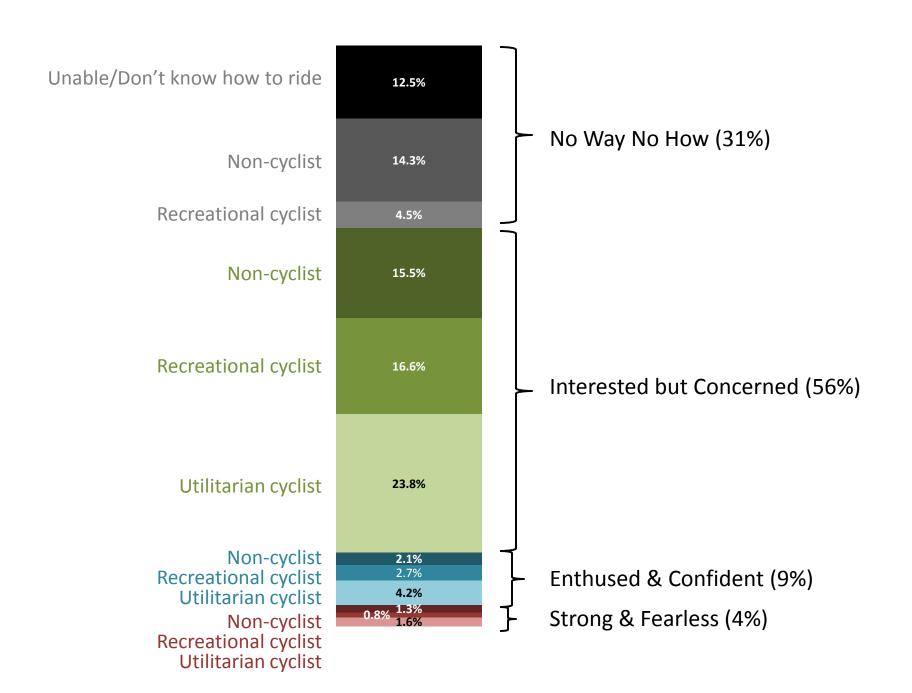
- Non-cyclist
 - Zero times in the past 30 days OR
 - "I never ride a bicycle" (screening question)
- Utilitarian cyclist
 - Once in the past 30 days for work, school, shopping, etc. AND
 - Once a month in the typical summer OR winter month
- Recreational cyclist
 - Once in the past 30 days
 - Not classified as utilitarian

Step 3: Current Cycling Behavior

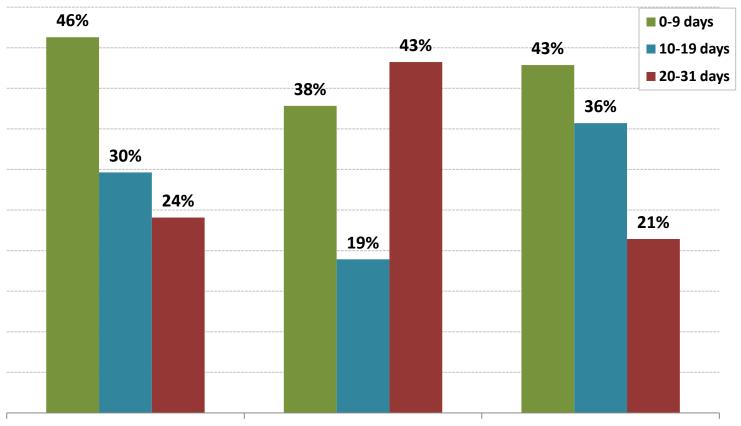
Туре	Description	Utilitar ian	Recrea tional	Non- cyclist	Unable /don't know	Total
Strong & Fearless	Very comfortable without bike lanes	42%	21%	36%		100%
Enthused & Confident	Very comfortable with bike lanes	46%	31%	23%		100%
Interested but Concerned	Uncomfortable and interested Uncomfortable, currently cycling for transportation but not interested in doing more	43%	30%	28%		100%
No Way No How	Physically unable or don't know Very uncomfortable on paths Uncomfortable, not interested, not cycling for transportation		14%	46%	40%	100%

Notes:

Includes the entire Portland region (Oregon only)
May not total 100% due to rounding.
Data are weighted by sex & age to reflect population

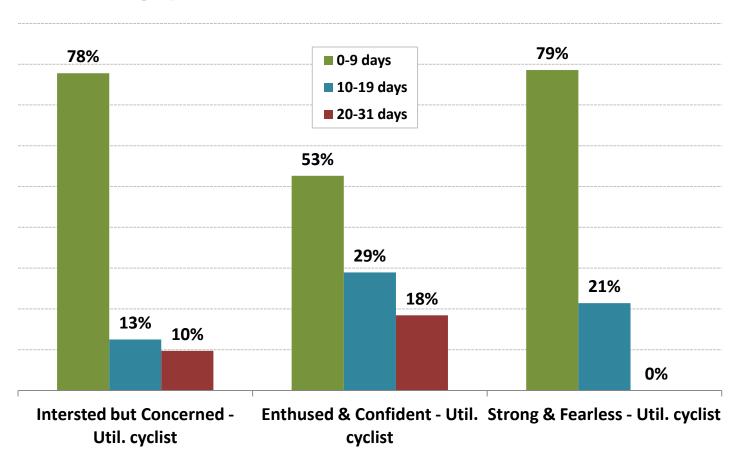


Amount of Utilitarian Cycling in a Typical Summer Month



Intersted but Concerned - Util. Enthused & Confident - Util. Strong & Fearless - Util. cyclist cyclist

Amount of Utilitarian Cycling in a Typical Winter Month

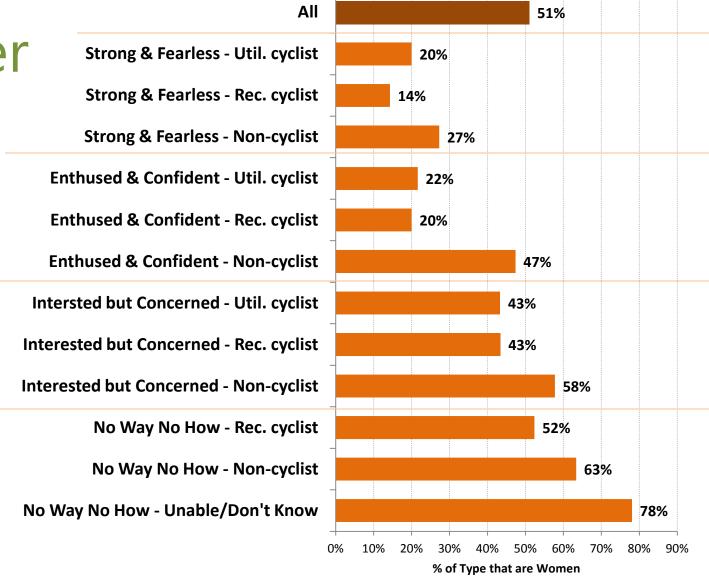


Interested but Concerned are newer to cycling

 About how long have you been bicycling regularly for commuting or other transportation?

	< 6 months	6-12 months	> 1 year
Interested but Concerned Utilitarian cyclist	11%	15%	74%
Enthused & Confident Utilitarian cyclist	5%	0%	95%

Gender



ΑII 31% 32% Strong & Fearless - Util. cyclist 93% 7% Strong & Fearless - Rec. cyclist 13% 50% **Strong & Fearless - Non-cyclist** 100% **Enthused & Confident - Util. cyclist** 14% 19% ■ 18 to 34 **Enthused & Confident - Rec. cyclist** 20% 20% ■ 35 to 54 ■ 55 or older **Enthused & Confident - Non-cyclist** 37% 32% **Intersted but Concerned - Util. cyclist** 47% 17% **Interested but Concerned - Rec. cyclist** 20% 34% **Interested but Concerned - Non-cyclist** 37% 22% No Way No How - Rec. cyclist 29% 19% No Way No How - Non-cyclist 42% 25% No Way No How - Unable/Don't Know 11% 73%

Differences in Environment

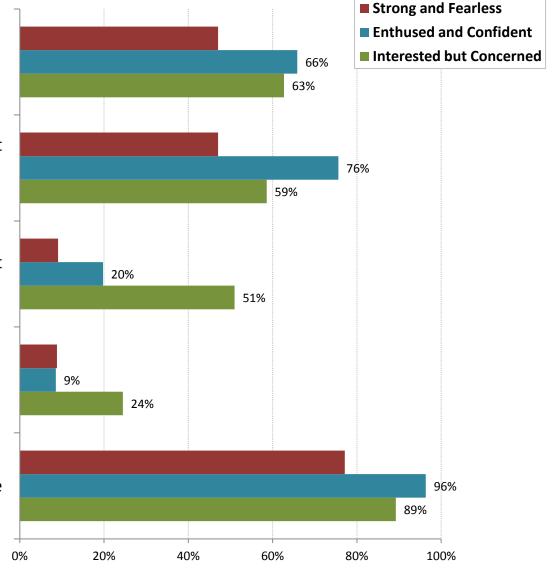
Many of the places I need to get to regularly are within biking distance of my home.

The speed of traffic on most nearby streets is usually slow.

There is so much traffic along nearby streets that it would make it difficult or unpleasant to bike.

There is so much traffic along the street I live on that it would make it difficult or unpleasant to bike.

There are quiet streets, without bike lanes, that are easy to get to on a bike.



Differences in Individuals

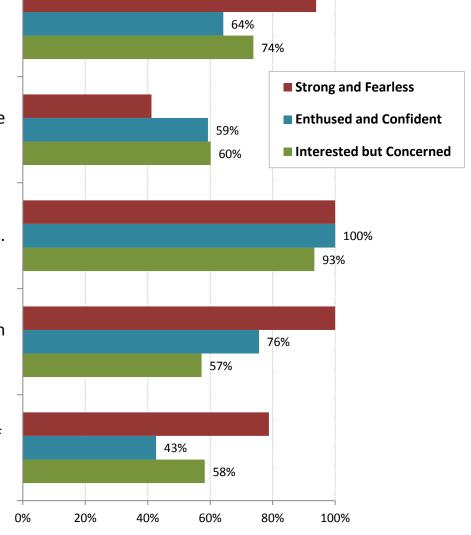
Biking for commuting or transportation requires me to wear different clothes than normal.

I would like to learn how to ride more safely in traffic.

I know how to ride a bike safely in traffic.

I would feel comfortable riding my bike in my neighborhood after dark.

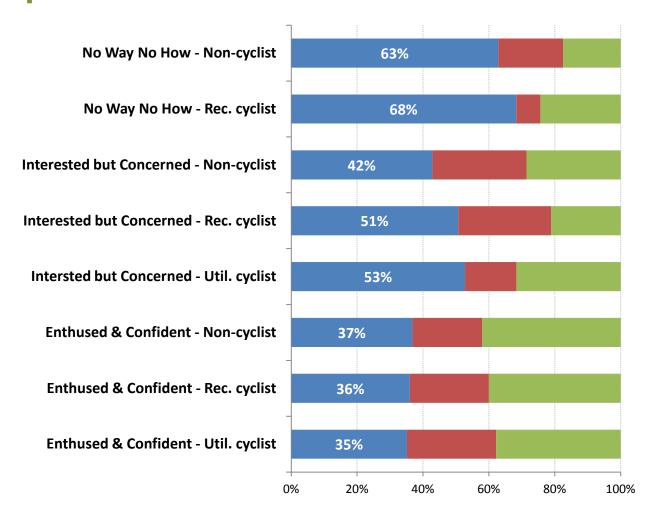
I don't have time to bike places instead of driving.



Experience as a kid

When you were under the age of 16, how often did you ride a bike to school?

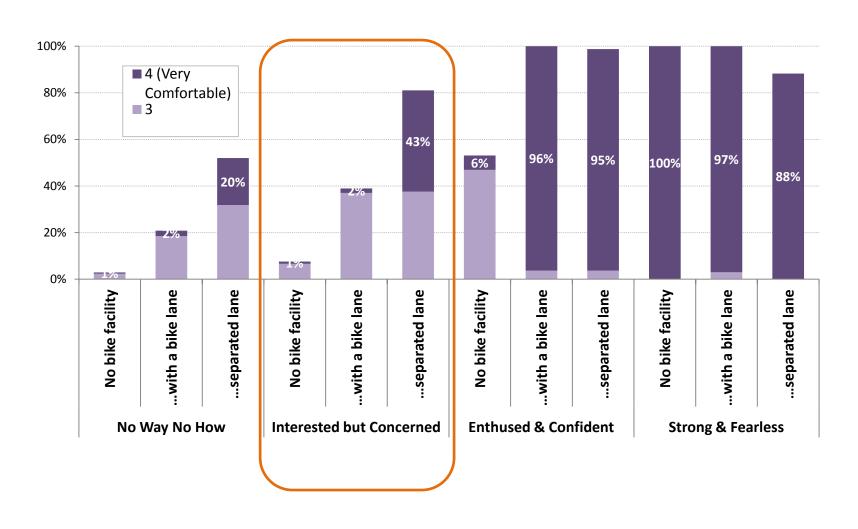




What about different facilities?

- A major urban or suburban street with four lanes, on-street parking, traffic speeds of 30-35 miles per hour, and no bike lane
 - What if a striped bike lane was added?
 - What if it also had a wide bike lane separated from traffic by a raised curb or parked cars?

Potentially a large effect on the Interested but Concerned



Limitations, etc.

- Phone survey likely misses the "invisible cyclist"
- Unclear how transferable findings are to other regions
- How does comfort level change with experience?

Next Steps, etc.

- Next steps
 - Further analysis
 - Develop other typologies from scratch
 - Your ideas are welcome!
- Contact information
 - web.pdx.edu/~jdill