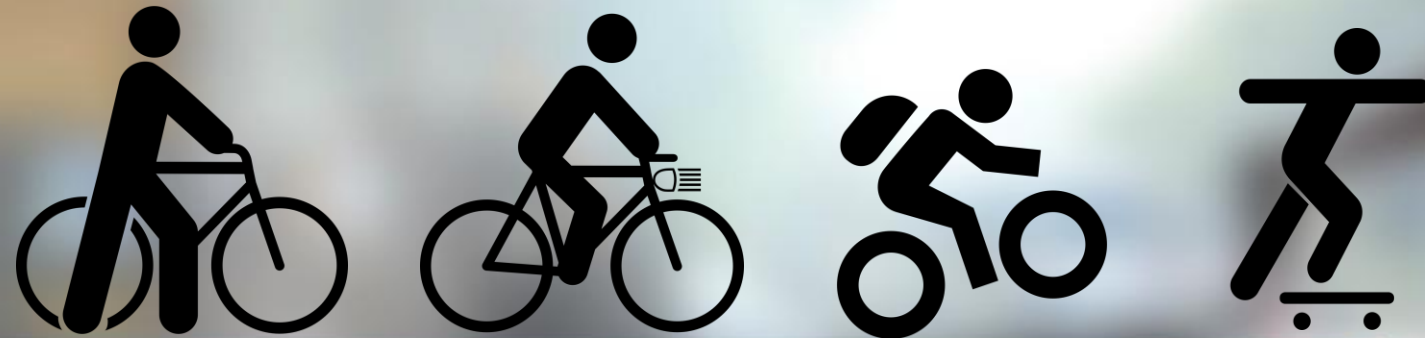


Portland Bike Count Volunteer Training

Instructions for counting people on bikes (and skateboards!)



WE KEEP PORTLAND MOVING.



PBOT
PORTLAND BUREAU OF TRANSPORTATION

What are we counting?

What are we counting?

The standard
bike count form

Bicycle Count Form use different form for each hour

Location: _____

Date: _____ Time: _____

Weather: _____ Name: _____

Notes: _____

	Masculine	Feminine	Total
<i>with</i> helmet			
<i>without</i> helmet			
<i>totals →</i>			

Indicate movement thru intersection by using arrows to show direction of travel (left turns, through, etc.).
Indicate north, label legs of intersection. If not standard intersection, use blank form and draw in design.

North

Skateboard tally:

What are we counting?

Tracks gender
and helmet use



Bicycle Count Form use different form for each hour

Location: _____

Date: _____ Time: _____

	Masculine	Feminine	Total
<i>with</i> helmet			
<i>without</i> helmet			
<i>totals</i> →			

Skateboard tally:

What are we counting?

Includes a diagram
for turning
movements



Bicycle Count Form use different form for each hour

Location: _____

Date: _____ Time: _____

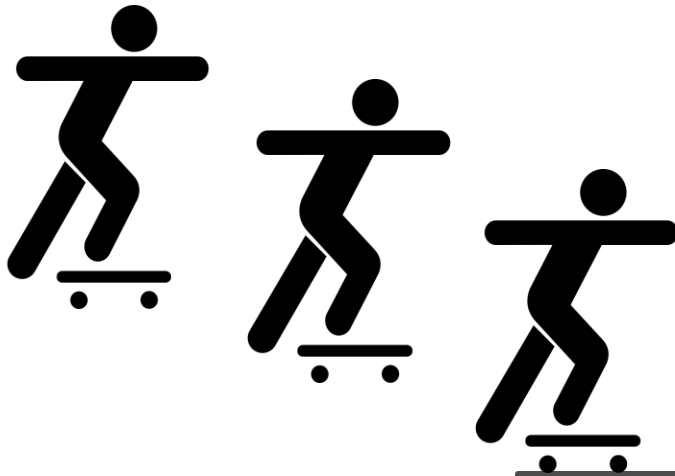
Weather: _____ Name: _____

Notes: _____

North

Skateboard tally: _____

What are we counting?



With a separate
tally for
skateboards

Skateboard tally:

Bicycle Count Form use different form for each hour

Location: _____

Date: _____ Time: _____

Weather: _____ Name: _____

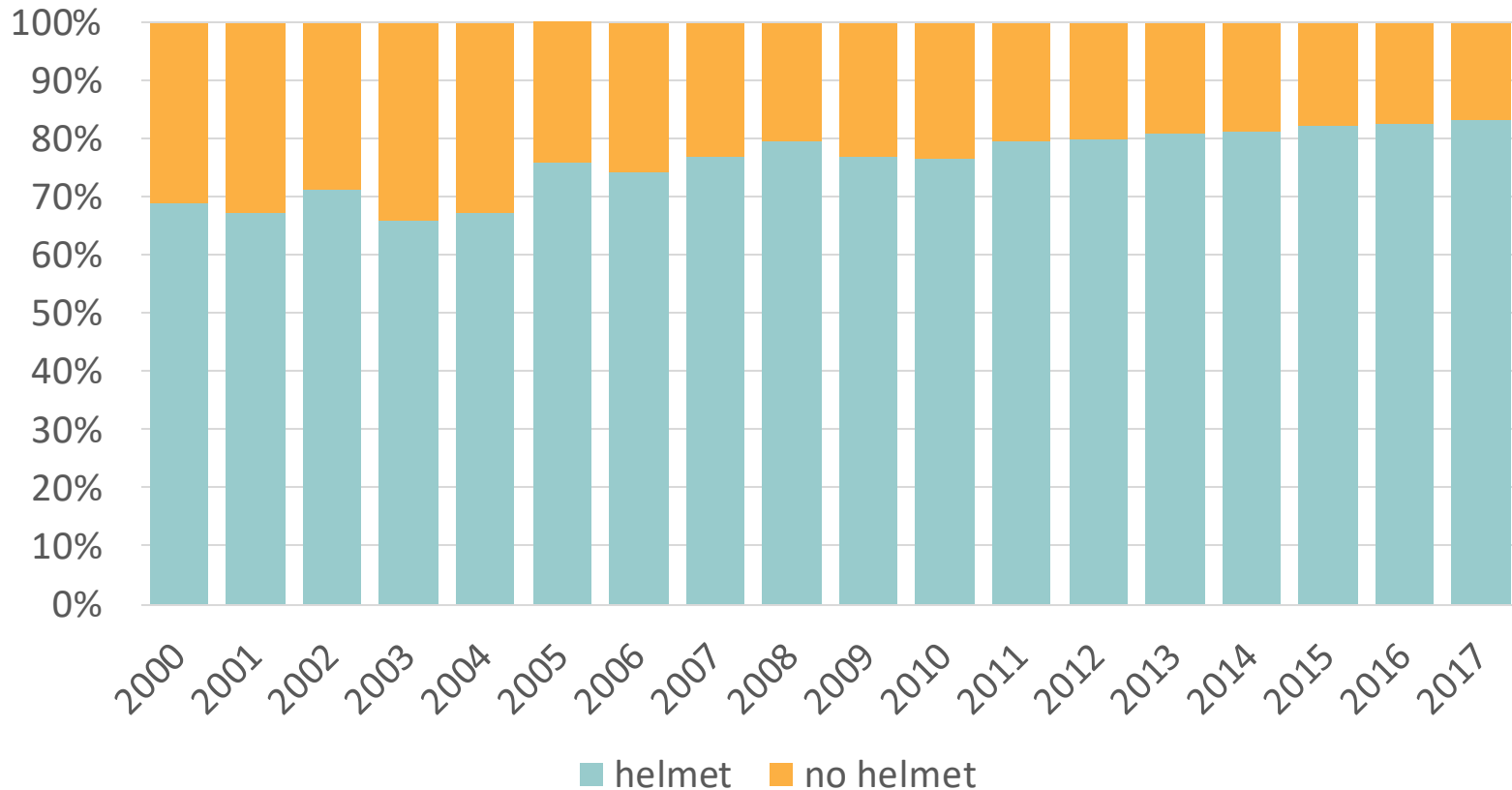
Notes: _____

	Masculine	Feminine	Total
with helmet			
without helmet			
<i>totals →</i>			

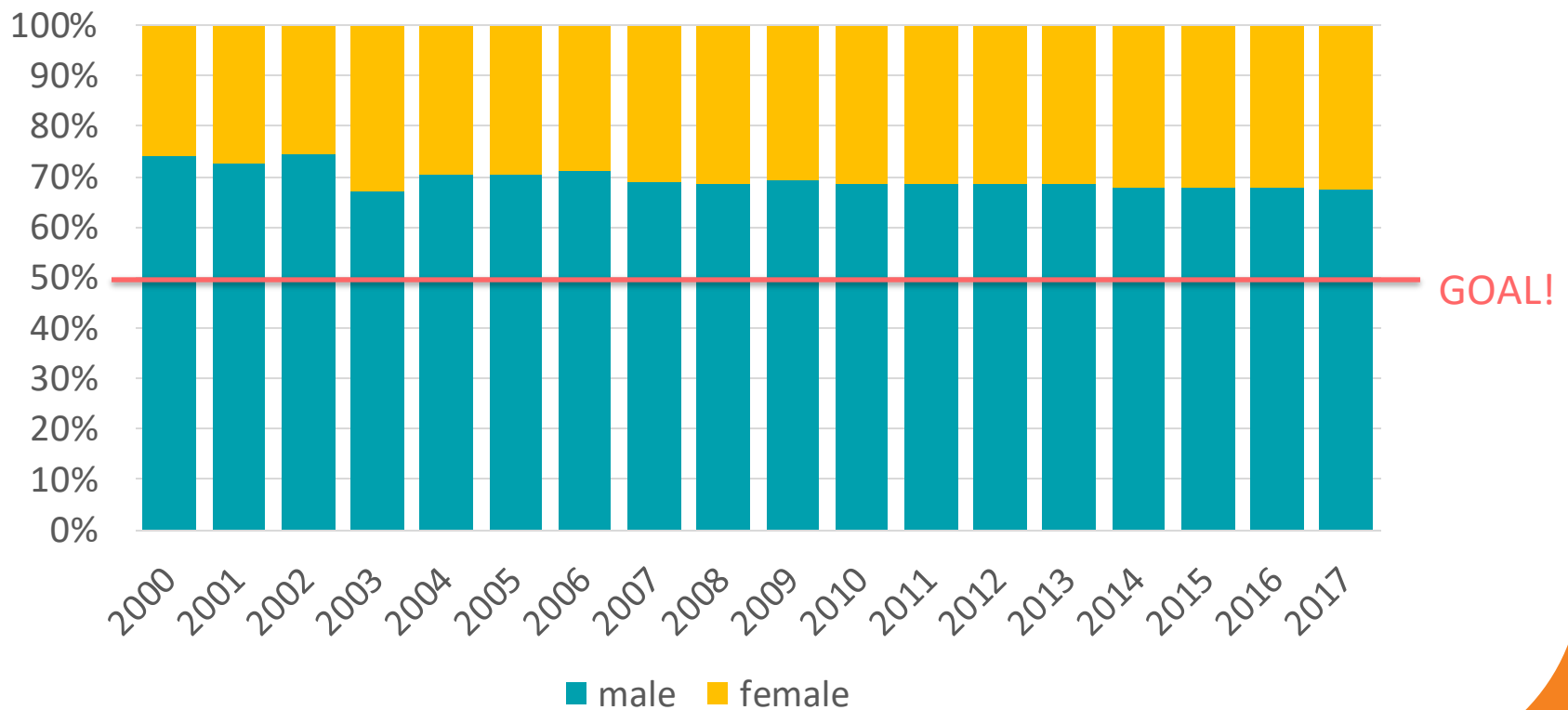
Indicate movement thru intersection by using arrows to show direction of travel (left turns, through, etc.).
Indicate north, label legs of intersection. If not standard intersection, use blank form and draw in design.

North

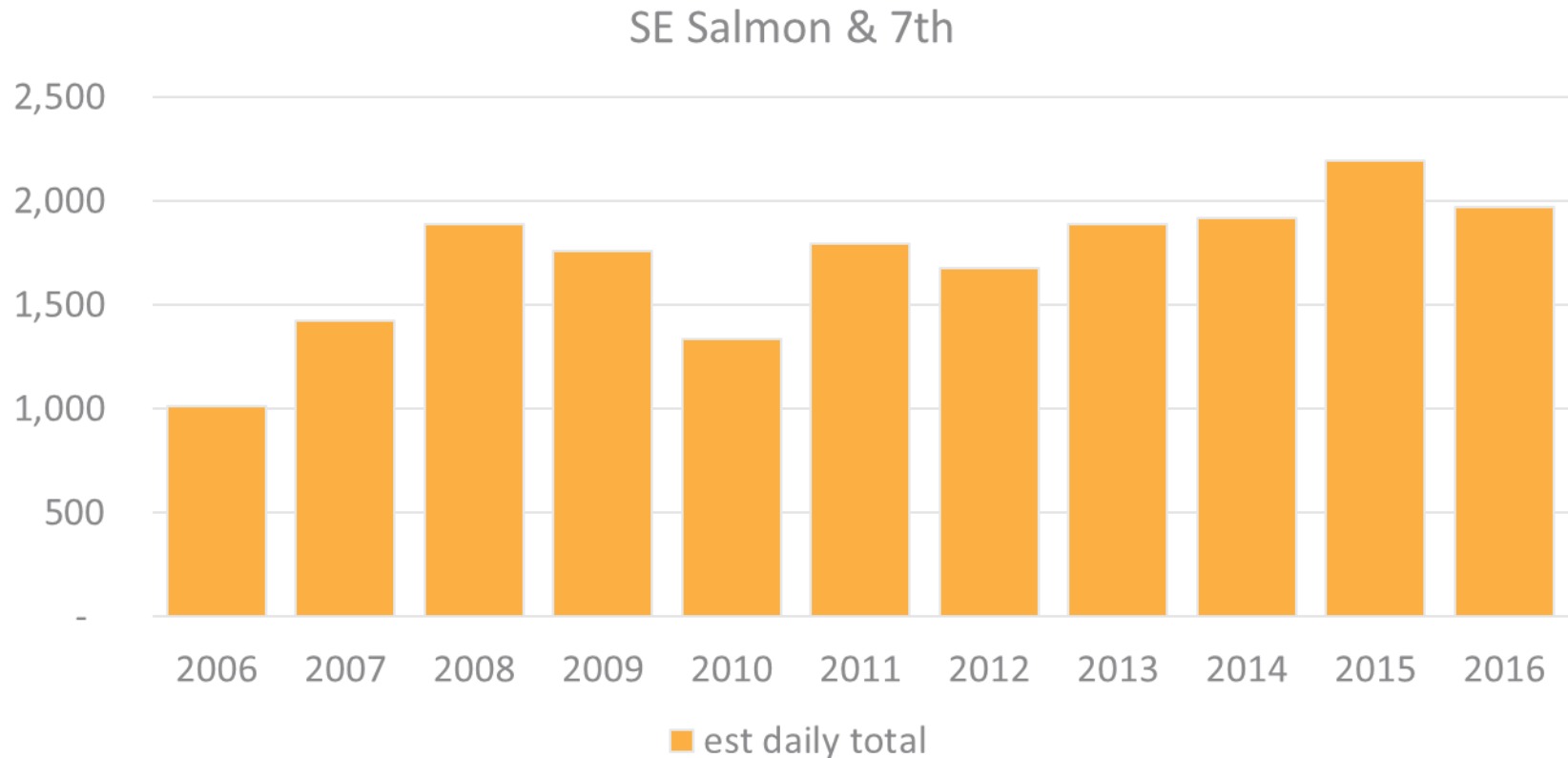
Citywide helmet use is up to 83%



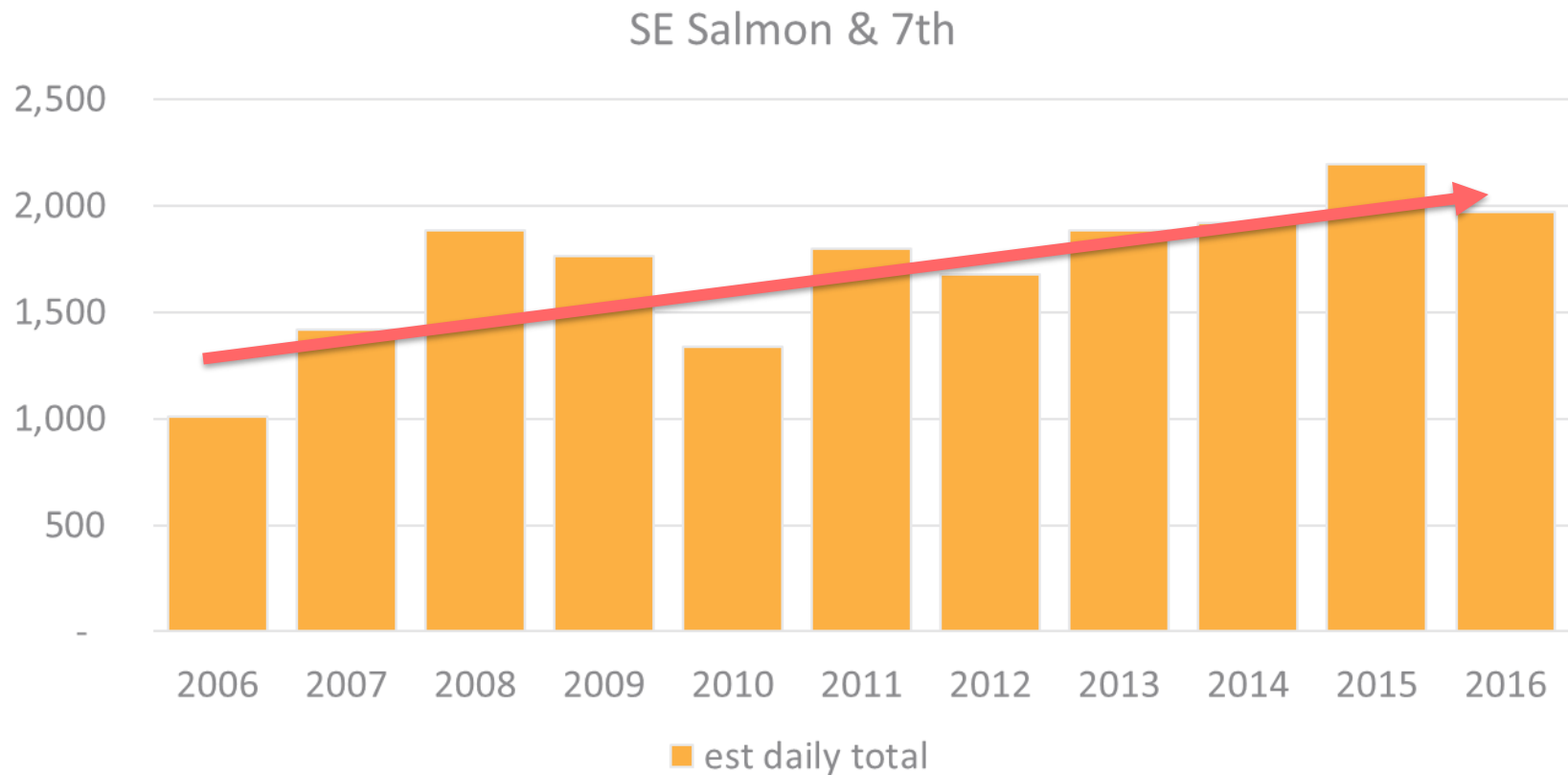
In 1992, only one in five people on bikes were female; in 2017, it was **one in three**.
(We're aiming for one in two.)



Site counts go up and down from year to year...

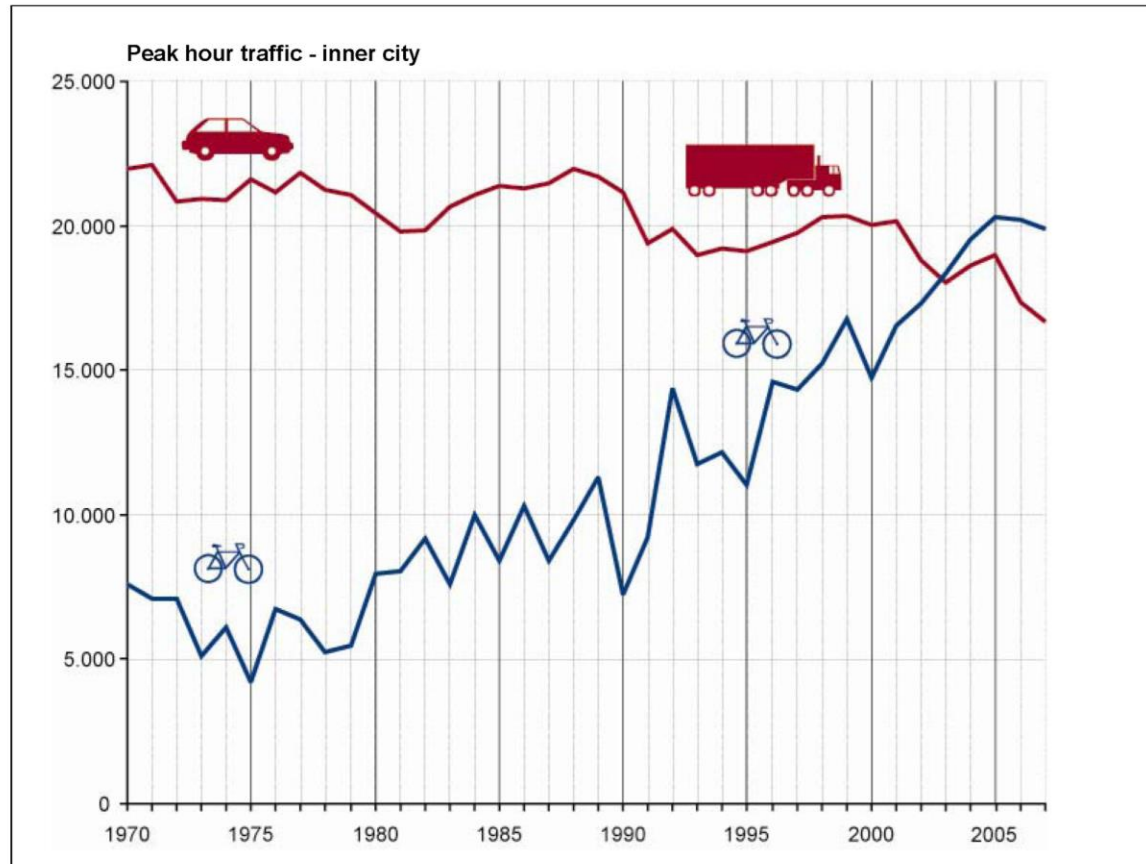


...and trends develop over time.



Don't worry - we'll get there!

Copenhagen's bike mode share was not a straight line to the top.

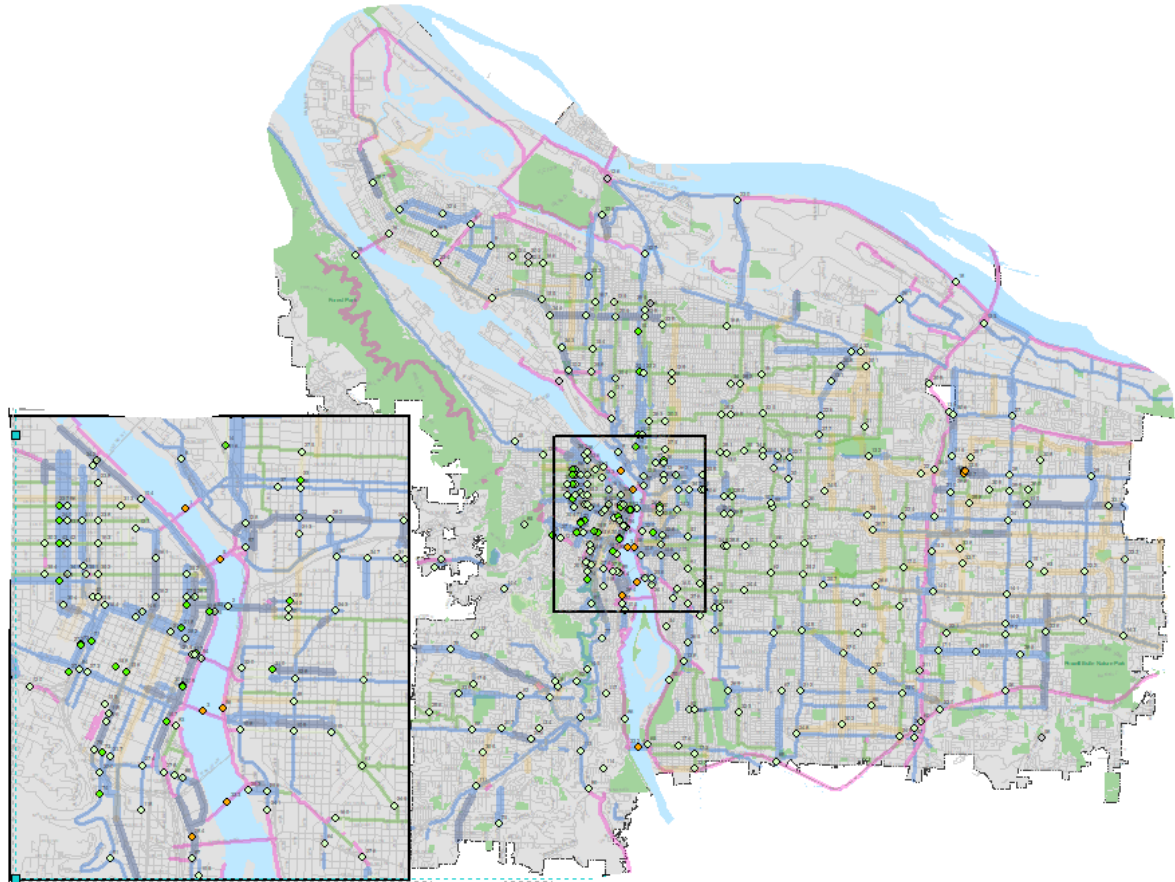


Where are we counting?

Where are we counting?

318 sites citywide

sector	# sites
Bridge	2
City Center	44
East	50
North	41
Northeast	54
Northwest	26
Southeast	65
Southwest	31
South	5



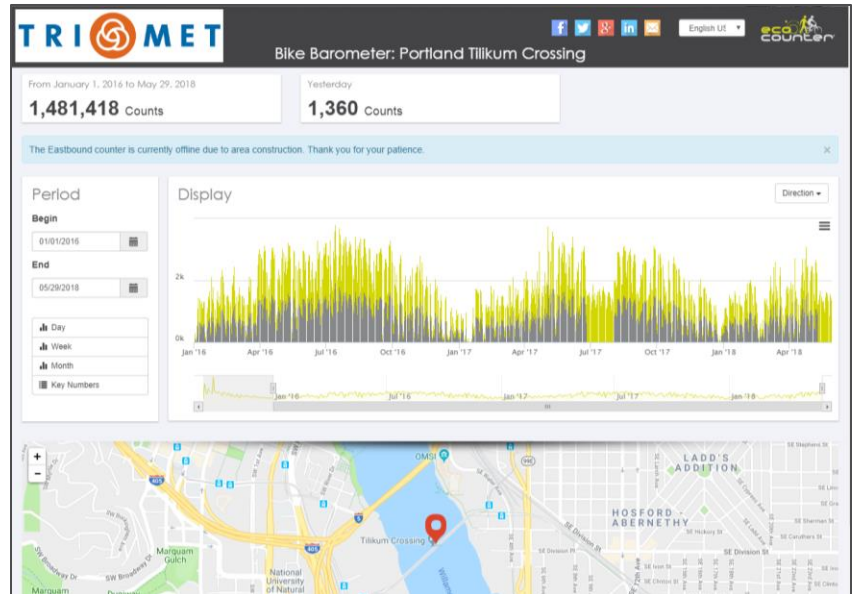
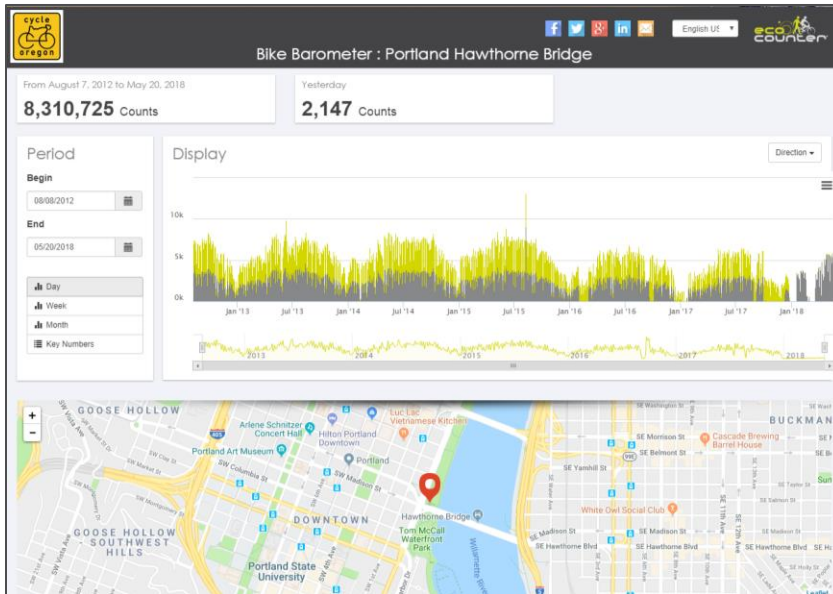
Most sites are located at the intersection of two bikeways.

- Streets with bike lanes
- Neighborhood greenways
- Multi-use paths



SE Ankeny & 28th

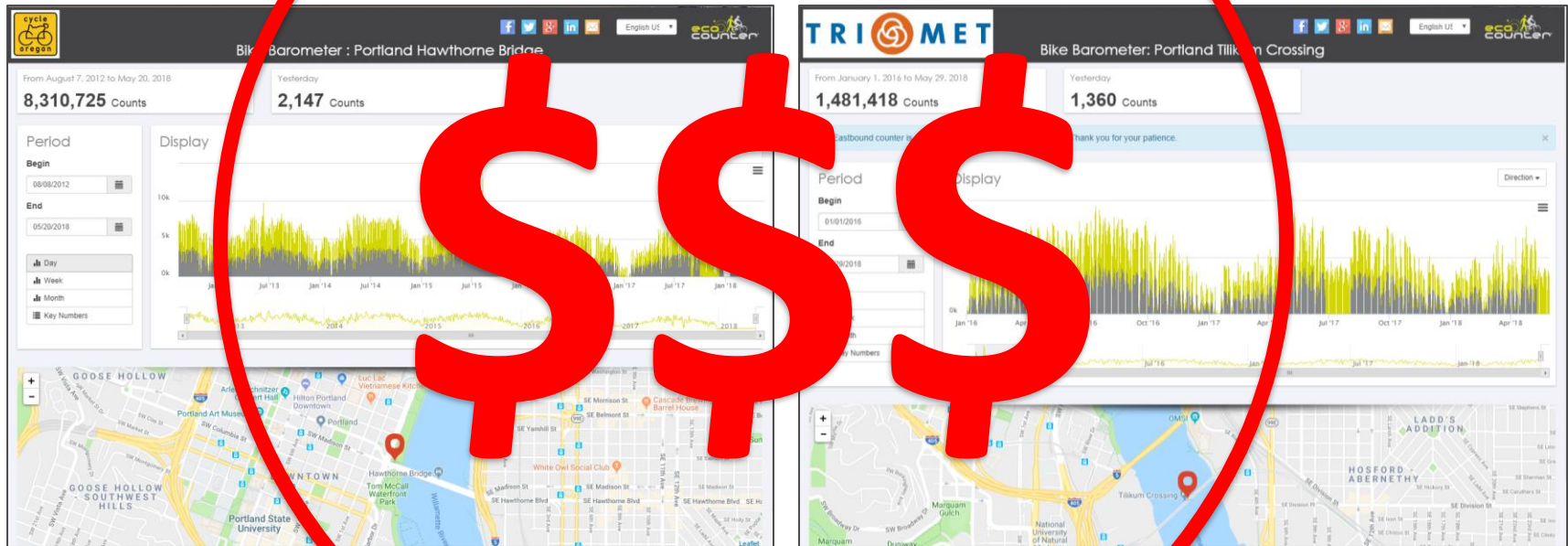
Portland also has a few automated “hose” counts.



Hawthorne Bridge: <http://portland-hawthorne-bridge.visio-tools.com/>

Tilikum Crossing: <http://portland-tilikum-crossing.visio-tools.com/>

Portland also has a few automated “hose” counts.



Hawthorne Bridge: <http://portland-hawthorne-bridge.visio-tools.com/>

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That's why we need you!



That's why we need you!

We utilize **100+ volunteers** every summer to count as many sites as we can.



That's why we need you!

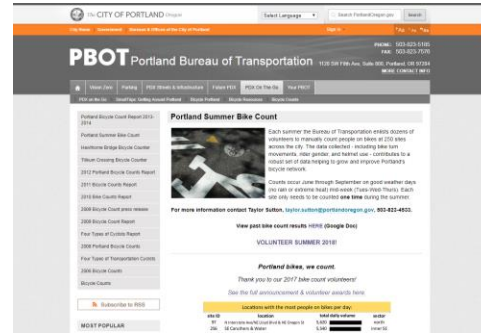
We utilize **100+ volunteers** every summer to count as many sites as we can.



Thank
you!

tinyurl.com/portlandbikecounts

- Count forms
- Map of sites
- Data
- This presentation



tinyurl.com/pdxbikecounts2022

- Volunteer assignments
- Available sites

[illegible]

When are we counting?

When are we counting?

- **Summer months:** June through September
- **Mid-week:** Tuesday, Wednesday, or Thursday
- During **peak rush hour:** 4-6pm for most, 7-9am for some
- Each site is only counted **one time**

Summer 2022 Bike Count Calendar

Conduct counts on good weather Tuesdays, Wednesdays, or Thursdays from June through September.

Holidays:

June 19th, Juneteenth
July 4th, Independence Day
September 5th, Labor Day

Do not count during the week of July 4th!



Note:

Do not count on shaded dates!

Sun
7

June	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30		

August	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
	31	1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31	1		

July	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24/31	25	26	27	28	29	30

September	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2	3
	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29	30	

When are we counting?

Avoid counting:

- On rainy days
- During extreme heat
- The week of Independence Day



When are we counting?

Last day to complete a bike count:

THURSDAY, SEPTEMBER 29

DO NOT BE LATE.

How are we counting?

How are we counting?



Instructions for Using the Bicycle Count Form

1. Complete the top portion of the form with information about where & when you are counting.
 - Location: typically names of intersecting streets, include site ID # if you know it
 - Date: include date & day of week
 - Time: clearly label the time period, one hour page
 - Weather: general weather information (cool, cold, warm, hot, sunny, raining, overcast, etc.)
 - Notes: anything unusual, such as nearby construction that might affect people riding bikes, lots of wrong-way riding by people on bikes, or many people riding on the sidewalk
2. Establish the North arrow.
 - If you are unsure which way is north, draw in landmarks such as a park, grocery store, or other business
3. Label the streets on the intersection drawing.
 - Modify the drawing (or use a blank form) for T-intersections or other non-standard intersections
4. Draw in arrows representing each legal move that can be made by a person on a bike (straight through, right turn, left turn, etc.).
5. Count each bike passing through the intersection by making a tick mark in two locations: below next to the arrow in the diagram that describes their movement through the intersection, and above in the corresponding box for helmet use & gender.
 - Begin counts precisely at the beginning of the hour and end promptly at the end of the hour
 - Remember to flip to page 2 for the second hour
6. After two hours, count your tally marks and record in each section.
 - Record the totals for each gender/helmet box in the top portion
 - Record the totals for each movement in the lower diagram
7. Write the total number of gender/helmet tallies in the box provided. Record the total from the directional count in the lower right-hand corner.
 - When there is a discrepancy between the gender/helmet tally and the directional tally, the directional tally will be used

Tips for Counting:

- Mark the tally only after the bicycle has passed through the intersection, rather than trying to anticipate their movement. Try picking a visual point the bike must pass before you record the information.
- When working with a partner, especially at busy intersections, it generally works best if one person records the directional information and the other records the gender and helmet information on a separate sheet.
- Do not try to add the tally information after the first hour; wait until the count is complete.
- DO INCLUDE people riding on the sidewalks and/or making illegal movements through the intersection.
- DO NOT INCLUDE people walking their bikes.

Bicycle Count Form use different form for each hour

Location: NE 12th & Tillamook ①

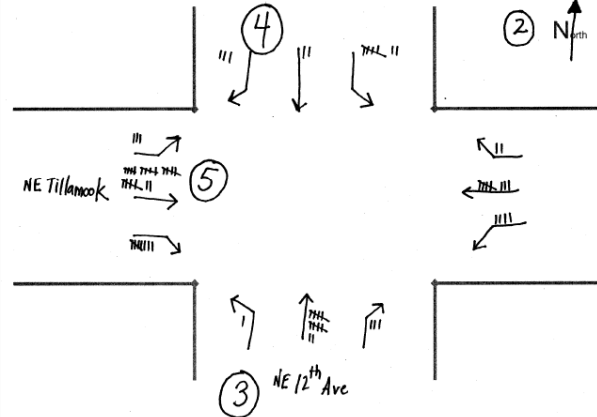
Date: 7/25/06 Time: 4:00 - 5:00 pm

Weather: 80's, sunny Name: John Doe

Notes:

	Masculine	Feminine	Total
with helmet	⑤		59
without helmet			16
totals →	⑥ 45	30	75 ⑦

Indicate movement thru intersection by using arrows to show direction of travel (left turns, through, etc.). Indicate north, label legs of intersection. If not standard intersection, use blank form and draw in design.



Download instructions at tinyurl.com/portlandbikecounts

How are we counting?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

← Numbered steps
=
Circled numbers →

Instructions for Using the Bicycle Count Form

Arrive at count location at least 10 minutes before count begins. Complete the form (both sides). You should tally for one hour.

- Complete the top portion of the form with information about where you are counting.
 - Location: typically names of intersecting streets, include date & day of week
 - Time: clearly label the time period, one hour page
 - Weather: general weather information (cool, cold, warm)
 - Notes: anything unusual, such as nearby construction that may affect counts, or of wrong-way riding by people on bikes, or many people riding.
- Establish the North arrow.
 - If you are unsure which way is north, draw in landmarks such as a park, grocery store, or other business
- Label the streets on the intersection drawing.
 - Modify the drawing (or use a blank form) for T-intersections or other non-standard intersections
- Draw in arrows representing each legal move that can be made by a person on a bike (straight through, right turn, left turn, etc).
- Count each bike passing through the intersection by making a tick mark in two locations: below next to the arrow in the diagram that describes their movement through the intersection, and above in the corresponding box for helmet use & gender.
 - Begin counts precisely at the beginning of the hour and end promptly at the end of the hour
 - Remember to flip to page 2 for the second hour
- After two hours, count your tally marks and record in each section.
 - Record the totals for each gender/helmet box in the top portion
 - Record the totals for each movement in the lower diagram
- Write the total number of gender/helmet tallies in the box provided. Record the total from the directional count in the lower right-hand corner.
 - When there is a discrepancy between the gender/helmet tally and the directional tally, the directional tally will be used

Tips for Counting:

- Mark the tally only after the bicycle has passed through the intersection, rather than trying to anticipate their movement. Try picking a visual point the bike must pass before you record the information.
- When working with a partner, especially at busy intersections, it generally works best if one person records the directional information and the other records the gender and helmet information on a separate sheet.
- Do not try to add the tally information after the first hour; wait until the count is complete.
- DO INCLUDE people riding on the sidewalks and/or making illegal movements through the intersection.
- DO NOT INCLUDE people walking their bikes.

Download instructions at tinyurl.com/portlandbikecounts

How are we counting?

Plan ahead:

- Scope out your site before you count
- Find a shady spot, bring a hat or umbrella
- Bring snacks and water
- Use a clipboard or other hard surface to write on
- Bring an extra writing utensil
- Don't forget your count form!



Bicycle Count Form use different form for each hour

Location: _____

Date: _____ Time: _____

Weather: _____ Name: _____

Notes: _____

	Male	Female	Total
with helmet			
without helmet			
Totals →			

Indicate movement thru intersection by using arrows to show direction of travel (left turns, through, etc.).
Indicate north, label legs of intersection. If not standard intersection, use blank form and draw in design.

_____ N

Skateboard tally: _____

Before you start, prepare the count form.

1. Fill in the top portion on both sides.
 - You will count one hour per side
 - Note anything unusual or interesting
 - Construction
 - Lots of bikes on the sidewalk
 - Large Pedalpalooza ride

Bicycle Count Form use different form for each hour

Location: NE 12th & Tillamook

Date: 7/25/06 Time: 4:00 - 5:00 pm

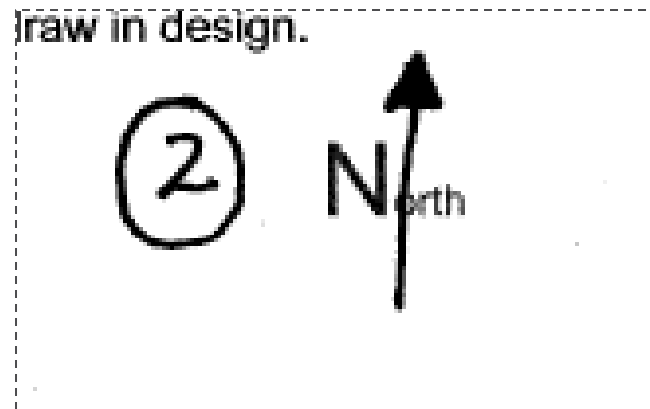
Weather: 80's, sunny Name: John Doe

Notes: _____

①

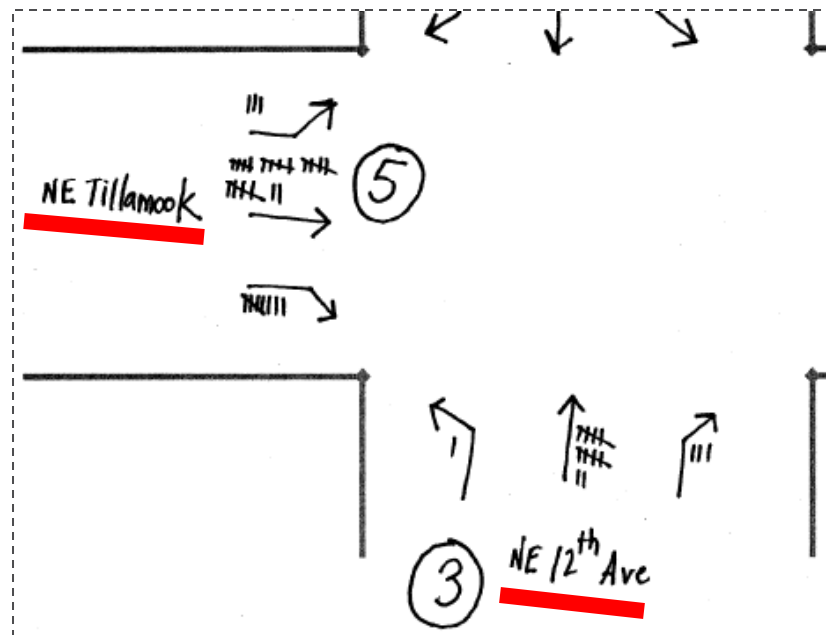
Before you start, prepare the count form.

1. Fill in the top portion on both sides.
2. Draw an arrow to indicate which way is North.
 - If you are unsure, draw in other landmarks such as a park or grocery store.



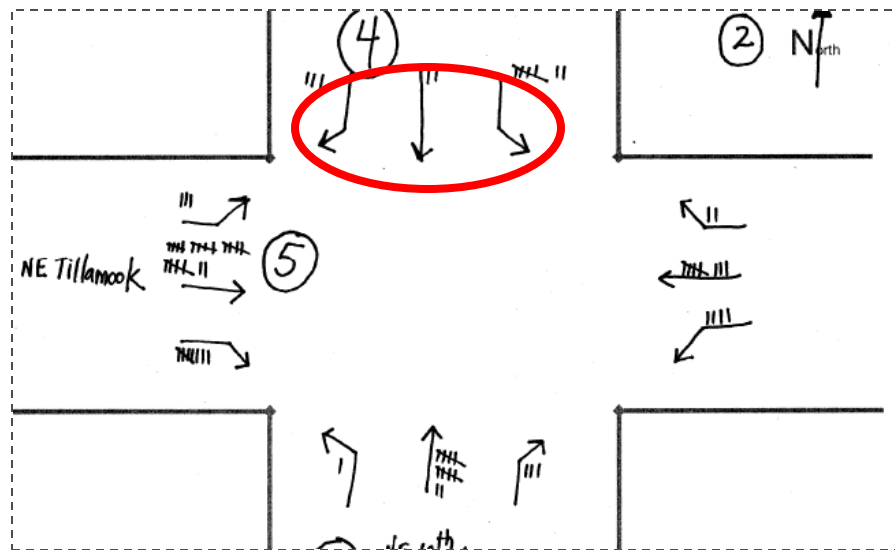
Before you start, prepare the count form.

1. Fill in the top portion on both sides.
2. Draw an arrow to indicate which way is North.
3. Label the streets in the diagram at the bottom of the page.



Before you start, prepare the count form.

1. Fill in the top portion on both sides.
2. Draw an arrow to indicate which way is North.
3. Label the streets in the diagram at the bottom of the page.
4. Draw arrows in the diagram to represent potential movements.



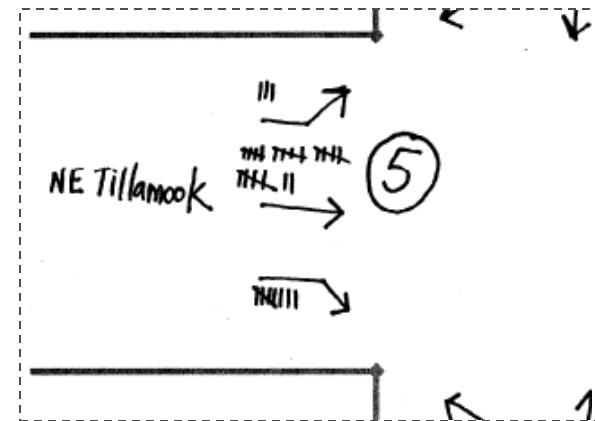
During the count, track helmets, gender, and direction of travel.

5. Count each person on a bike as they pass through the intersection.

- **Each bike gets two tick marks:** one for helmet/gender and one for direction of travel
- Flip to page 2 after the first hour

	Masculine	Feminine	Total
with helmet	 		59
without helmet			16
totals →	6 45	30	75

Indicate movement thru intersection by using arrows to show direction of travel (left, thru, through, etc.)



During the count, track helmets, gender, and direction of travel.

5. Count each person on a bike as they pass through the intersection.

BONUS: Tally skateboards!

- You do not need to track helmet/gender for skateboards
- Keep this separate from the bike tallies



without helmet			
totals →			

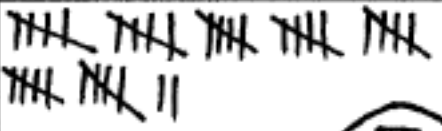
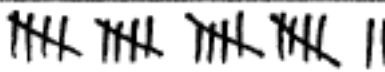
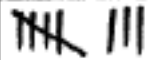
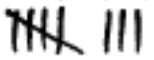
Indicate movement thru intersection by using arrows to show direction of travel (left turns, through, etc.).
Indicate north, label legs of intersection. If not standard intersection, use blank form and draw in design.

North

Skateboard tally:

After the count, check your tally marks.

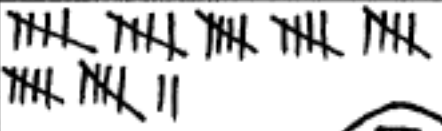
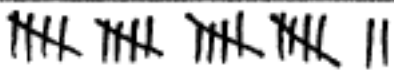
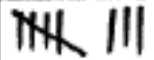
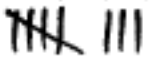
6. Add the tally marks for each section of the top box.

	Masculine	Feminine	Total
with helmet	 (5)		59
without helmet	 (5)		16
totals →	(6) 45	30	75 (7)

Indicate movement thru intersection by using arrows to show direction of travel (left turns, through, etc.).

After the count, check your tally marks.

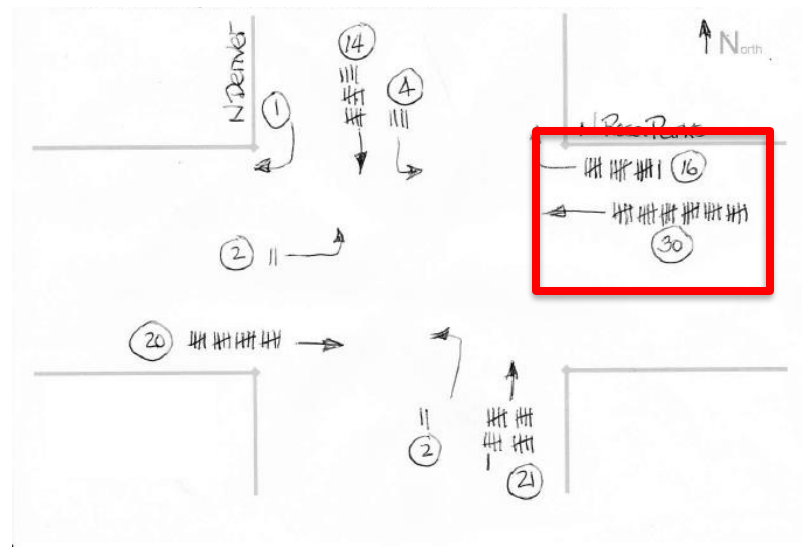
6. Add the tally marks for each section of the top box.
7. Sum together and write the total in the lower right box.

	Masculine	Feminine	Total
<i>with</i> helmet	 (5)		59
<i>without</i> helmet	 (5)		16
<i>totals</i> →	(6) 45	30	75 (7)

Indicate movement thru intersection by using arrows to show direction of travel (left turns, through, etc.).

After the count, check your tally marks.

6. Add the tally marks for each section of the top box.
7. Sum together and write the total in the lower right box.
8. BONUS: Add the tally marks in the bottom diagram.
 - This should match the total from the top



A completed count form:

Bicycle Count Form use different form for each hour

Location: N Rosa Parks + N Denver

Date: 18 June 2015 Time: 5-6pm

Weather: 75° sunny Name: John Beaston

Notes: Lots of speeding along N Rosa Parks

	Masculine	Feminine	Total
with helmet	 63	 26	89
without helmet	 17	 4	21
totals →	80	30	110

Indicate movement thru intersection by using arrows to show direction of travel (left turns, through, etc.).
Indicate north, label legs of intersection. If not standard intersection, use blank form and draw in design.

Let's review:

Let's review:

Start and end precisely at the top of the hour.

4-6pm for most counts, 7-9am for some.



Don't forget to flip to the next page for hour two!

Let's review:

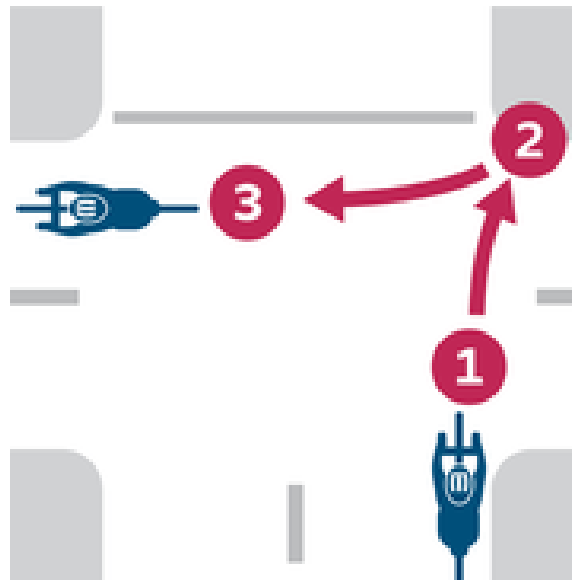
Do not cheat!



We're depending on the counts to be accurate

Let's review:

Wait to record the movement until it is complete.



People on bikes sometimes use sidewalks and crosswalks to better position themselves in the roadway.

Let's review:

Remember to mark each person on a bike for helmet/gender and for direction of travel.

Bicycle Count Form use different form for each hour

Location: _____

Date: _____ Time: _____

Weather: _____ Name: _____

Notes: _____

	Masculine	Feminine	Total
with helmet		✓	
without helmet			
totals →			

Indicate movement thru intersection by using arrows to show direction of travel (left turns, through, etc.).
Indicate north, label legs of intersection. If not standard intersection, use blank form and draw in design.

Skateboard tally: _____

If there are discrepancies, the directional count will be used.

High-volume Sites

^ = 200-400 bikes expected

Consider
a partner!

* = 400+ bikes expected

Partner
required!

High-volume sites are not recommended for new volunteers.

When counting with a partner, it usually works best to have one person track gender/helmet and the other track the direction of travel.

Bicycle Count Form Use different form for each hour

Location: _____ Date: _____ Time: _____

Weather: _____ Name: _____

Notes: _____

	Male	Female	Total
with helmet	✓	✓	
without helmet	✓	✓	
Total →			

Indicate movement this intersection by using arrows to show direction of travel (left turn, through, etc.). Indicate north, use sign of direction. If no standard intersection, use blank form and draw a sketch.

Skateboard tally: _____

Bicycle Count Form Use different form for each hour

Location: _____ Date: _____ Time: _____

Weather: _____ Name: _____

Notes: _____

	Male	Female	Total
with helmet			
without helmet			
Total →			

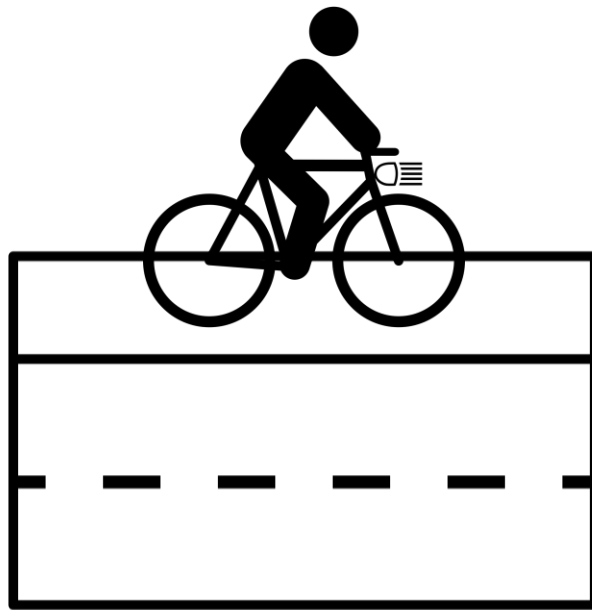
Indicate movement this intersection by using arrows to show direction of travel (left turn, through, etc.). Indicate north, use sign of direction. If no standard intersection, use blank form and draw a sketch.

Skateboard tally: _____

Frequently Asked Questions

Frequently Asked Questions

Q: Should I include people riding on the sidewalk?



Frequently Asked Questions

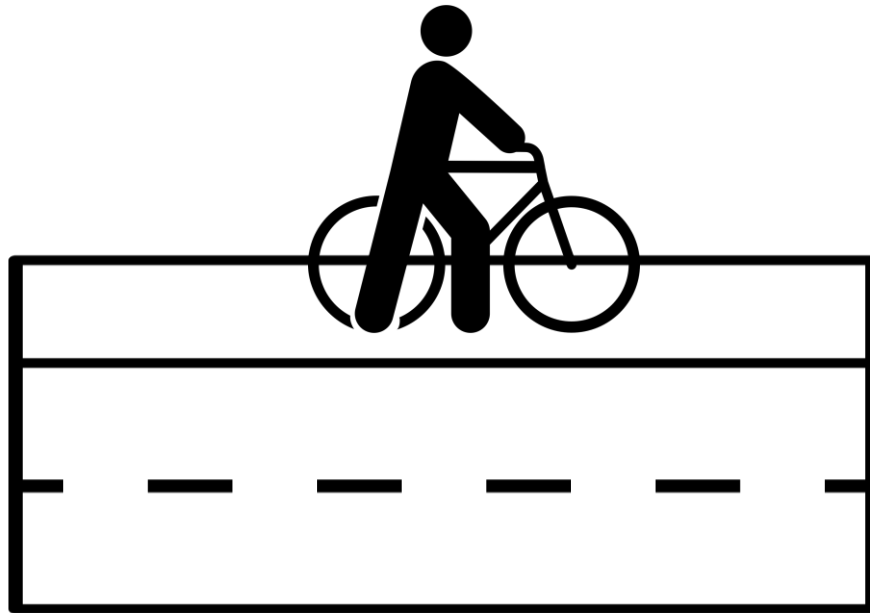
Q: Should I include people riding on the sidewalk?

A: Yes. This could indicate that existing infrastructure is not ideal for how cyclists want to get around. We want to know!

Bonus: It's helpful if you can draw a sidewalk on the count form with separate arrows; otherwise, write a note at the top of the form indicating if there were a few or many sidewalk riders.

Frequently Asked Questions

Q: What about people *walking* their bike?



Frequently Asked Questions

Q: What about people *walking* their bike?

A: No. Only include people actively riding through the intersection.

Frequently Asked Questions

Q: Should I count people riding the wrong way on a one-way street, or those making an illegal turn movement?



Frequently Asked Questions

Q: Should I count people riding the wrong way on a one-way street, or those making an illegal turn movement?

A: Yes. Any illegal or otherwise questionable movements should still be counted.

Frequently Asked Questions

Q: Should I include people using scooters or segways?



Frequently Asked Questions

Q: Should I include people using scooters or segues?

A: No. We want to focus on getting an accurate count of bicycles.

*We really want you to **count skateboards**, but please keep these tallies **separate** from the bike tallies.*

Frequently Asked Questions

Q: How would I count a tandem or a child on a bike?



Frequently Asked Questions

Q: How would I count a tandem or a child on a bike?

A: Generally, if someone is pedaling you should count them separately.

Frequently Asked Questions

Q: How would I count a tandem or a child on a bike?

A:



2



1



4

Frequently Asked Questions

Q: What if there is a large group of people (such as a Pedalpalooza ride) riding by at once?



Frequently Asked Questions

Q: What if there is a large group of people (such as a [Pedalpalooza](#) ride) riding by at once?

A: Do your best to accurately count them all. Mention in the Notes field that the count included an organized, high-volume bike ride. Try to note the number in the ride in the notes.

- For high-volume intersections*, bring a friend to help you count

Frequently Asked Questions

Q: What if the cyclist is wearing spandex/is a child/is not wearing clothes?



Frequently Asked Questions

Q: What if the cyclist is wearing spandex/is a child/is not wearing clothes?

A: Count everyone on a bicycle.

- Portlanders use bikes for many different reasons including transportation, recreation, commuting, and more. We want to count them all – EVERY BIKE COUNTS!

Frequently Asked Questions Recap:

Q: Should I include people riding on the sidewalk? **A:** Yes.

Q: Should I include people walking their bike? **A:** No

Q: Should I include people riding the wrong way on a one-way street? **A:** Yes.

Q: Should I count people using scooters or segues? **A:** No.

Q: How would I count a tandem or a child on a bike?

A: If they are pedaling, count them each separately.

Q: What if there is a large group all at once? **A:** Count them.

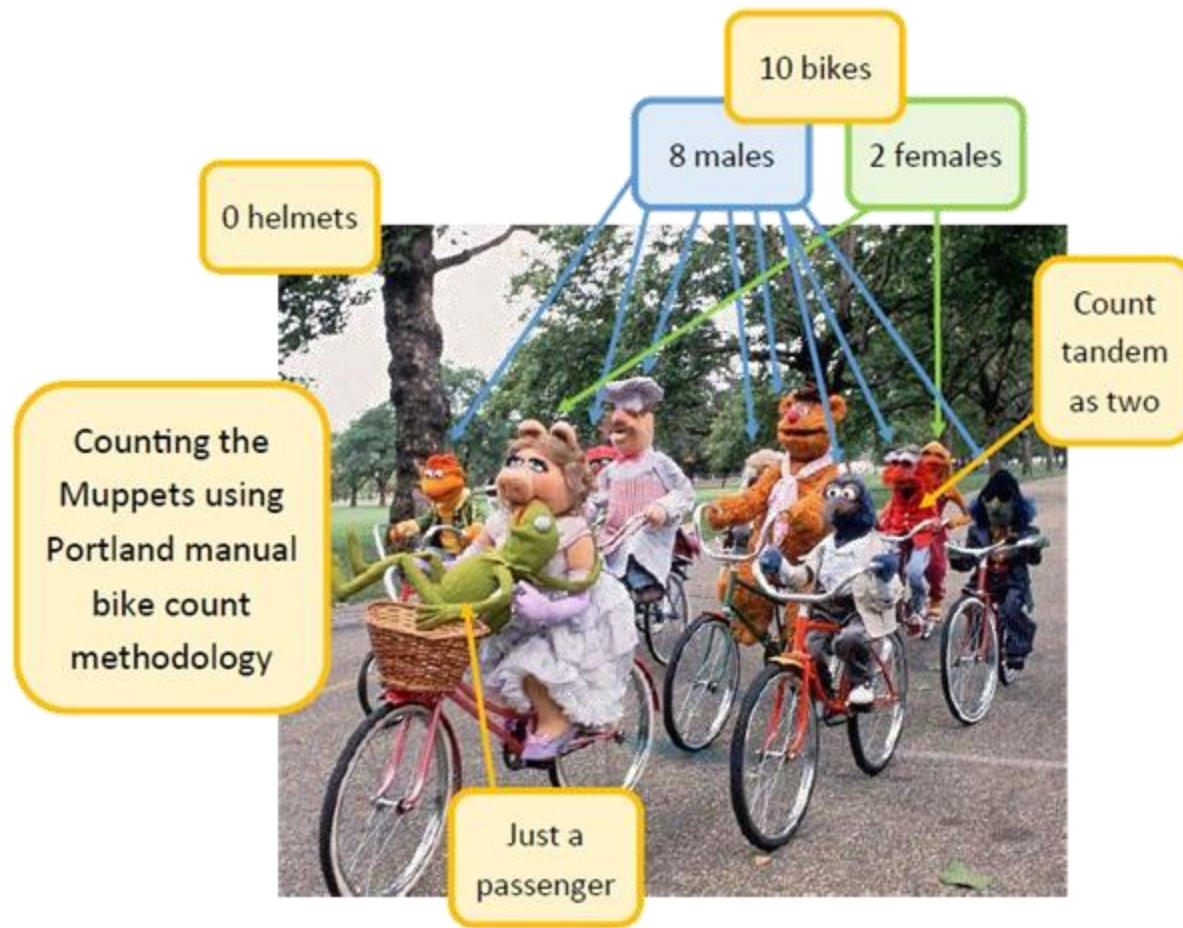
Q: What if the cyclist is wearing spandex/is a child/is not wearing clothes? **A:** Count them all!

Pop Quiz!

How would you count these guys?



Pop Quiz!



When you have completed your count(s):

Please return your count forms ASAP!

by MAIL

Roger Geller
PBOT Bike Count
1001 SW 5th Ave, Ste 1300
Portland, OR 97204

by SCAN & E-MAIL

roger.geller@portlandoregon.gov

Check tinyurl.com/pdxbikecounts2022
if you want to grab another site!

Thank you!

We couldn't do this without you.



Contact Roger Geller with any questions, or to sign up for count sites!

roger.geller@portlandoregon.gov, 503-823-7671

Find count forms and other info at:

tinyurl.com/portlandbikecounts



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PORTLAND BUREAU OF TRANSPORTATION



BIKE COUNT