

### APPENDIX A: DATA COLLECTION INSTRUMENTS

### APPENDIX B: EXISTING CONDITIONS REPORT



### **Changing Lanes Survey**

#### General travel trends

#### 1. What is your zip code?

□90025	□90064	□90049	□90002
□90059	□91352	□91504	□91505
□91040	□91331	□Other	

#### 2. How often did you use the travel choices listed below **BEFORE the COVID-19 pandemic**?

	Every Day	A few times per week	A few times per month	A few times per year	Never
How often did you drive alone?					
How often did you carpool or get a ride with someone else?					
How often did you use Uber, Lyft, or a taxi?					
How often did you take public transportation?					
How often did you use a bicycle, skateboard, or scooter?					
How often did you walk to places?					

#### 3. In the last 7 days, how many days did you?

Drive somewhere by yourself?		0	1	2	3	4	5	6	7
Carpool or get a ride somewhere?	I	0	1	2	3	4	5	6	7
Take an Uber, Lyft, or taxi to go somewhere?		0	1	2	3	4	5	6	7
Ride public transportation to go somewhere?		0	1	2	3	4	5	6	7
Ride a bicycle, skateboard, or scooter to go somewhere?	I	0	1	2	3	4	5	6	7
Walk to get somewhere?		0	1	2	3	4	5	6	7

## 4. Who in your household is currently <u>most often</u> responsible for getting errands done (like grocery shopping, going to the pharmacy, childcare trips, etc.)?

□l am

□Spouse/Significant Other

DAnother person in my household (family member, roommate, care-taker, etc.)

DSomeone who lives outside of my household (child, or neighbor, etc.)

Il share these responsibilities equally with others in my household

DMost of our household serving errands are done online

 $\gg$ 

#### 5. How long does it take to get to the grocery store where your household buys most of your groceries?

DLess than 15 minutes D1

□30 - 45 minutes

DMore than 45 minutes

2

#### 6. From the list below, select the top three things that you think would make travel easier for you:

Easier access to a car
Delivery services that bring things to me (groceries, medicine, etc.)
One transit pass that everyone in my household can use
Free transit for kids
More frequent bus or train service
INeighborhood shuttle service
IFree transfers between different types of buses or trains (DASH and Metro, for example)
IPayment credits to use for Lyft or Uber rides
IAccess to public restrooms, public seating, or other amenities
IBetter sidewalks and streets that make walking more comfortable
IMore direct transit service between my home and where I need to go
IBike share stations in my neighborhood
IOther \_\_\_\_\_\_\_\_\_\_

#### 7. What keeps you from walking more in your neighborhood now? Select all that apply

DNot enough lighting at night / only feel comfortable walking during the day

DPoorly maintained, cracked, uneven sidewalks

IToo many other people around or overcrowding

□Too many cars / traffic

□Fear of crime

□No places to walk to nearby

EStreet intersections / street crossings that feel unsafe

DPhysical limitations (I can't walk very far)

 $\gg$ 

Dother \_\_\_\_\_

## 8. Please read the following statements and indicate whether you <u>always agree, sometimes agree, neutral,</u> <u>disagree, or do not think it applies to you</u>.

	Always agree	Sometimes agree	Neutral	Disagree	Does not apply to me
I feel uncomfortable around people I do not know					
Privacy is important to me when I travel					
I feel safe on a bus or train					
I feel safe in a car or private vehicle					
I feel safe waiting for transit					
I feel safe walking in my neighborhood					
I like being outside of my house					
I feel safe when I see other people around me					

	Always agree	Sometimes agree	Neutral	Disagree	Does not apply to me
The cost of gas influences the number of places I go/trips I make				٥	
Travel costs are a financial burden for me					
I walk to places to save money					
I use public transit to save money on transportation expenses				٥	
Lyft / Uber / taxis are expensive to use					
It is difficult to get places I need/want to go on public transit					

<u>Demographics</u> 9. How many people, including y	ou, live in your	household?		_	
10. How many are under age 5?					
11. How many are ages 5-16?					
12. How many cars are owned, le household?	eased, or availa -	able for regular u	se by the p	eople who cui	rrently live in your
13. Before the pandemic, were y	ou employed?	□Yes, full time	□Yes,	part-time	□No
<b>14. Are you employed now?</b> DYes	s, full time [	⊐Yes, part-time	⊡No, l'm	furloughed fro	m my job □No
15. Do you have a driver's license	e? 🛛 Yes 🛛	lNo			
16. What was your annual house	hold income be	efore taxes last y	ear (in 201	9)?	
□Under \$25,000	□\$25,000 - \$	\$50,000	□\$50,00	0 - \$75,000	
□\$75,000 - \$100,000	□\$100,00 ar	nd over	□Don't k	know/prefer no	ot to answer
<b>17. What race/ethnicity do you i</b> DWhite (non-Hispanic)	<b>dentify with? (</b> ∉ □Asian	check all that app	oly) / Indica	<b>ite all that app</b> DNative Ame	<b>bly</b> rican
🛛 Hispanic / Latinx	□Middle-east	tern / North Africa	an	DPrefer not to	o say
□Black	□Native Haw	aiian / Pacific Isla	ander	🛛 Other	
18. Which of the following age ra	inges reflects	your age?			
0-17 018-29	□30-39	□40-49 I	⊒50-59	□60-69	□70+
19. Which of the following best r	eflects your ge	ender identity?			
DFemale DMale	9	DTransgen	der female	DTrans	gender male
□Gender non-conforming		□Other		□Prefer no	t to say
20. Please indicate if you identify	y as LGBTQI+ (	(Lesbian/Gay/Bis	exual/Tran	sgender/Quee	er/Intersex)?
□Yes		□No		□Prefer no	t to say
21. How would you like us to con number in the space below.	itact you if you	ı win this week's	raffle prize	? Please ente	r your email or phone
Email address			Phone	number	
22. Are you interested in particip	ating in a 20 to	o 30 minute trave	el question	naire? Particip	ants will be paid \$35.
□Yes; please write your phone r	number				)

### Encuesta de Changing Lanes del Departamento de Transportación de Los Ángeles

¡Gracias por tomar la encuesta del estudio Changing Lanes! Solo residentes de Sawtelle, Watts y Sun Valley son eligibles para tomar la encuesta y participantes deben tener 16 años o más. Tarjetas de regalo de \$5 se enviarán a todos los participantes que completan la encuesta al fin de la colección de datos al final de octubre. KDI reserva el derecho de retener tarjetas de regalo de cualquier participante que no cumpla con los requisitos o que envíe entradas de encuestas sospechosas. Si tenga preguntas sobre la encuesta o el estudio de Changing Lanes, por favor escriba a ChangingLanes@Kounkuey.org

#### 1. ¿Cuál es tu zip code/ código postal? \_\_\_\_\_

#### 2. ¿Con qué frecuencia utilizó los siguientes modos de viaje ANTES de la pandemia COVID-19?

	Todos los días	Unas cuantas veces por semana	Unas cuantas veces al mes	Algunas veces al año	Nunca
¿Con qué frecuencia condujo solo/sola?					
¿Con qué frecuencia compartió el coche con otra persona?					
¿Con qué frecuencia usó Uber, Lyft o un taxi?					
¿Con qué frecuencia tomó el transporte público?					
¿Con qué frecuencia usó una bicicleta, un monopatín o un scooter?					
¿Con qué frecuencia caminó a lugares?					

#### 3. En los últimos 7 días, cuántos de esos días:

¿Manejó solo hacia un lugar?	0	1	2	3	4	5	6	7
¿Compartió el coche con otra persona para ir a algún lugar?	0	1	2	3	4	5	6	7
¿Tomó un uber, lyft, o taxi?	0	1	2	3	4	5	6	7
¿Usó transporte público?	0	1	2	3	4	5	6	7
¿Usó una bicicleta, patineta, o scooter?	0	1	2	3	4	5	6	7
¿Caminó para llegar a algún lugar?	0	1	2	3	4	5	6	7

## 4. ¿Quién en su hogar es actualmente más a menudo responsable de hacer los mandados (por ejemplo comprar alimentos, ir a la farmacia, viajes de cuidado de niños, etc.)?

ПYо

5

□Cónyuge/Pareja

Dtra persona en mi hogar (miembro de la familia, compañero de habitación, cuidador, etc.)

DAlguien que vive fuera de mi hogar (niño, o vecino, etc.)

 $\gg$ 

Comparto estas responsabilidades por igual con otras personas en mi hogar

ELa mayoría de nuestros mandados domésticos se realizan en línea

## 5. ¿Cuánto tiempo le demora ir al mercado donde los miembros de tu hogar hacen la mayoría de sus compras de mercado?

□Menos de 15 minutos □15-30 minutos □30-45 minutos □Más de 45 minutos

## 6. En la lista que le mencionaré a continuación, <u>seleccione las tres cosas principales</u> que cree que le harían sus viajes más fáciles.

Dacceso fácil a un vehículo privado
Dervicios de envío que me traigan cosas (cosas del mercado, medicina, etc.)
Dun pase de transporte que todos en mi hogar pueden usar
Dervicio más frecuente de tren o autobús
Dervicio de transbordo entre vecindarios
Dervicio gratuito entre agencias de transporte (DASH y Metro por ejemplo)
Dervicio para usar en Lyft o Uber
Dervicio de tránsito más directos públicos u otros servicios
Dervicio de tránsito más directos entre mi casa y donde necesito ir
Dervicio de bicicleta en mi vecindario

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 $\gg$ 

#### 7. ¿Qué te impide caminar más en tu vecindario actualmente? Seleccione todos los que correspondan

INo hay suficiente luz por la noche / solo me siento cómodo/cómoda caminando durante el día
IBanquetas con falta de mantenimiento, quebradas, y desniveladas
IDemasiadas persona alrededor
IDemasiados autos / tráfico
IMiedo de crimen
INo hay suficientes lugares cercanos a donde caminar
IIntersecciones/ cruces peatonales inseguros
ILimitaciones físicas (No puedo caminar lejos)

#### 8. En las siguientes declaraciones indique si <u>siempre está de acuerdo, a veces está de acuerdo, neutral, no</u> está de acuerdo o no cree que se aplique a usted.

	Siempre está de acuerdo	A veces está de acuerdo	Neutral	No está de acuerdo	No cree que se aplique a usted
Me siento incómodo/incómoda cerca de gente que no conozco					
La privacidad es muy importante para mí cuando viajo					
Me siento seguro/segura en un autobús o tren					
Me siento seguro/segura en un coche o vehículo privado					
Me siento seguro/segura esperando por el transporte público					
Me siento seguro/segura caminando en mi vecindario					
Me gusta estar fuera de mi casa					
Me siento seguro/segura cuando veo a otras personas a mi alrededor					
	Siempre está de acuerdo	A veces está de acuerdo	Neutral	No está de acuerdo	No cree que se aplique a usted
El costo del gas influye en el número de lugares a los que voy/viajes que hago					

	Siempre está de acuerdo	A veces está de acuerdo	Neutral	No está de acuerdo	No cree que se aplique a usted
Los costos de viajes son una carga financiera para mí					
Camino a lugares para ahorrar dinero					
Utilizo el transporte público para ahorrar dinero en gastos de transporte					
Lyft / Uber / taxis son caros de usar					
Es difícil viajar a lugares a los que necesito/quiero ir usando transporte público					

#### Preguntas demografías

9. ¿Cuántas personas, incluyéndose a usted, viven en su hogar? Incluya a todas las personas que viven en su dirección. \_\_\_\_\_

10. ¿Cuántos son menores de 5 años? \_\_\_\_\_

11. ¿Cuántos tienen entre 5 y 16 años? \_\_\_\_\_

12. ¿Cuántos autos son propiedad suya, alquilados o disponibles para su uso regular por las personas que actualmente viven en su hogar? \_\_\_\_\_

13. Antes de la pandemia, ¿tenía trabajo? 🛛 Sí, a tiempo completo 🛛 Sí, a medio tiempo 🖾 No

**14. ¿Tiene trabajo actualmente?** □Sí, a tiempo completo □Sí, a medio tiempo □No, fui suspendido/suspendida de mi trabajo □No

15. ¿Tiene licencia para conducir? DSi DNo

 $\gg$ 

#### 16. ¿Cuál fue su ingreso familiar anual antes de impuestos el año pasado (en 2019)?

□Menos de \$25,000	□\$25,000 - \$50,000	□\$50,000 - \$75,000
□\$75,000 - \$100,000	□\$100,00 and y más	□No sé/prefiero no responder

## 17. ¿Con qué raza/etnicidad se identifica más? (marque todos los que correspondan) / Indique todos los que se aplican

□Blanco (no h	ispano)	□Asiático		INativo Americano			
🛛 Hispano / La	tino	Doriente Medio /	Norte de Afri	DPrefiere no decir			
□Negro		🛛 Nativo Hawaian	ativo Hawaiano / Isleño del Pacífico				
18. ¿Cuál de los	siguientes	rangos de edad re	fleja tu edad	?			
□0-17	□18-29	□30-39	□40-49	□50-59	□60-69	⊡Más de 70	
19. ¿Cuál de las	siguientes	opciones refleja m	iejor su ident	tidad de género?			
□Muje	r	□Hombre	ΠM	lujer transgénero	DHomb	ore transgénero	
<b>G</b> énero r	no conforme	2	□Otro		DPrefiere	no decir	

3

7

#### 20. Por favor indique si se identifica como LGBTQI+ (Lesbiana/Gay/Bisexual/Transgénero/Queer/Intersexual)?

□Si		□No	DPrefiere no decir						
21. ¿Le gustaría que nos pongamos en contacto con usted para enviar su tarjeta de regalo electrónica y si gana el premio de la rifa de semana?									
Correo electrónico	Correo electrónicoNumero telefónico								
22. ¿Está interesado en   pagará \$35.	participar en un cuestio	onario de viaje o	le 20 a 30 minutos? Quienes participen se les						
□Sí; por favor escriba su	u número de teléfono		🛛 🗆 🗆						
23. Como aprendió sobr □Blanca	e esta encuesta? □Lily		DWatts Century Latino Org.						
□Kiana	Dother		_						

### Changing Lanes Survey (CH)

General travel trends

#### 1. 你的邮政编码是多少?\_\_\_\_\_

#### 2. 我们第一组问题调查你在新冠疫情之前如何出行。对每一种交通方式,你可以回答:

	你之前每天使用	每周几次	每月几次	每年几次	或者从未有过。
你多久一次单独开车出行?	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	
你多久一次和其他人拼车出行?	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	
你多久一次使用优步,来福车,或者计程车?	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
你多久一次使用公共交通?	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	
你多久一次使用自行车,滑板或者摩托车?	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	
你多久一次步行到目的地?	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	

#### 3. 下面一组问题调查你如果出行。再过去的七天里,有几天中你:

单独开车?	0	1	2	3	4	5	6	7
和其他人拼车?	0	1	2	3	4	5	6	7
搭乘优步,来福车,或者计程车?	0	1	2	3	4	5	6	7
使用公共交通?	0	1	2	3	4	5	6	7
使用自行车,滑板,或者摩托车?	0	1	2	3	4	5	6	7
步行到达目的地?	0	1	2	3	4	5	6	7

#### 4. 在谁在负责家中差事?

○ 我是
○ 配偶
○ 家中另外一个成员 (家人,室友,看护人等)
○ 外部人员 (家人,看护人等,邻居等)
○ 我 和其他家庭成员一起承担这些差事
○ 大多数差事网上完成
○ 不想回答

≫

#### 5. 对于你们家庭来说,每次大概多久抵达经常光顾的超市?

☑ 15分钟之内	🛛 15-30分钟	🛛 30-45分钟	☑ 45分钟以上	☑不想回答
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9

#### 请在下列种选出你认为最好的三项,使得你的出行交通变得更方便。

- ☑ 更容易上车
- 🛛 送货服务上文服务(食品杂货,药品等)
- □ 一个公交卡使得家中每个成员都有便利条件
- 🛛 孩童免费乘坐交通
- ☑ 更频繁的巴士和火车服务站点
- 🛛 街区便捷公交
- 🛛 在巴士火车站点中 的免费接送 (比如类似DASH and Metro)
- 🛛 优步,来福车的付款信用金或者代金券
- 🛛 更方便地接近到公共厕所, 公共座椅或者其他便利设施
- ☑ 更好的街道人行通道让步行更加方便舒畅
- 🛛 在我和目的地之间建立更多的交通线路
- 🛛 在我的街区建立共享单车

#### 7. 有哪些因素阻碍你在街区内步行出行?

○ 晚上没有足够的灯光,只有白天才感觉安全
 ○ 破旧的人行道
 ○ 拥挤,太多人在街道上
 ○ 交通阻塞,太多车辆
 ○ 担心安全,罪犯问题
 ○ 附近没有什么地点方便步行,散步
 ○ 街道交叉路口使得步行不安全
 ○ 身体限制(我不能走太多路)
 ○ 其他原因?(任意回答)

 $\gg$ 

#### 8. 在阅读以下陈述后请选择: 经常同意, 有时同意, 中立, 不同意, 该声明不适用于我。

	经常同意	有时同意	中立	不同意	该声明不适用于我
我在陌生人中感觉很不舒服	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
出行中的隐私对我来说很重要	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
我在公交或者火车上感觉安全	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
我在轿车或者私人交通工具上感觉安全	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
在等候车辆时候我感觉安全	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
在街区步行时我感觉到很安全	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
我喜欢经常外出	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
看到周围有其他人让我感觉安心	$\bowtie$	$\bowtie$	$\square$	$\bowtie$	$\bowtie$

	经常同意	有时同意	中立	不同意	该声明不适用于我
油价直接影响我的出行次数	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
出行开销是我的经济负担	$\boxtimes$	$\boxtimes$	$\square$	$\boxtimes$	$\square$
我步行到目的地来节省开销	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
我使用公共交通来节省出行开销	$\boxtimes$	$\boxtimes$	$\square$	$\boxtimes$	$\square$
优步, 来福车很昂贵	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
公共交通很难抵达我需要前往的目的地	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$

<u>Demographics</u> 9. 你家中有几口人 <b>?</b>	-		
10. 其中有几个在五岁以下?			
<b>11.</b> 其中有几个在 <b>5-16</b> 岁之间?			
12. 其中有17岁或以上的年龄?			
13. 在疫情之前,你是否有工作?	□ 全职 □ 兼耳	兄の 兼职の イ	想回答
14. 你现在有工作吗?🛛 全职	】兼职 🛛 休假 🛛 🤅	没有 🛛 不想回答	
15. 在家中有几台车(不管是购买	<b>租,闲置的)?</b> 🛛 有	〒 🛛 没有 🛛 不想[	回答
16. 你家庭在2019年税前收入是多         ○ 低于\$25,000       ○ \$2         ○ 低于\$5,000 - \$100,000       ○ \$1	<b>少?</b> 5,000 - \$50,000 00,000 and over 超过\$1	☑ \$50,000 00,000  ☑ 不想回谷	) - \$75,000 答
<b>17. 你自我定义为哪个种族? 请</b>	■ <b>择适用的所有选项。</b> ⊠ 亚洲人	IX	印第安人
	凶 中东、北非	×	不想回答
凶 黑人	凶 夏威夷土著、太平洋	羊原住民	
18. 您的年龄实在什么范围内?			
🛛 0-17 🛛 18-29 🖂 :	30-39 🛛 40-49	⊠ 50-59 ⊠ 60-0	59 🛛 70+ 🛛 不想回答
<b>19. 您的性别是??</b> ☑ 女性 ☑ 非常规性格	☑ 男性 ☑ 其他	🛛 跨性别女人	<ul><li>☑ 跨性别男人</li><li>☑ 不想回答</li></ul>
<b>20. 你是否自我定义为女同性恋者</b> □ 是	_ <b>男同性恋者,双性恋</b> ⊠ 否	者,跨性别者,酷儿?	⊠不想回答
21. 如果你想获得五美金礼品卡并回复可以获得礼品卡。	且赢取100美金礼品卡,	请选择电子礼品卡的	类型。再次提醒:只有钱 <b>1500</b> 名
🛛 亚马逊电子礼品卡 🛛 塔吉特	百货公司礼品卡 🛛 我	不想获取礼品卡	
22. 请输入你的电子邮箱以便我们	发送礼品卡。(回答n/a	如果你不想获取礼品	卡)
23. 你有兴趣参与20到30分钟的出	行调查问卷吗?参与者	会被奖励 <b>\$35. </b> 是	⊠ 否
24. 如果中奖后, 你想让我们如	问联系你?		

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### Changing Lanes Survey (JP)

General travel trends

1. 郵便番号は何ですか? \_\_\_\_\_

2. 次の質問はCoV-19 Safer at Home (3/19 2020) まえの交通手段の選択を扱います。 あなたの答え毎日、週 に数回、月に数回、年に数回、またはまったく使用していなかったと言えます。

	<b>毎</b> 日	週に数回	月に数回	年に数回	一度ではない
どのくらい一人で運転しましたか?	$\bowtie$	$\bowtie$		$\bowtie$	$\bowtie$
どのくらいにカープールしましたか?	$\bowtie$				
どのくらいでユーバー、リフト、タクシーに乗りまし たか?					
どのくらいで公共交通機関を利用しましたか?	$\bowtie$	$\bowtie$			$\bowtie$
どのくらいで自転車、スケートボード、スクーターを 使用しましたか?					
どのくらいに場所まで歩いていましたか?				$\bowtie$	$\bowtie$

#### 3.次の質問はCoV-19 Safer at Home (3/19 2020) あとうの交通手段の選択を扱います。過去7日間で、次の 交通手段を何日選びましたか。日数で答えてください。

どのくらい一人で運転しましたか?	0	1	2	3	4	5	6	7
どのくらいにカープールしましたか?	0	1	2	3	4	5	6	7
どのくらいでユーバー、リフト、タクシーに乗りましたか ?	0	1	2	3	4	5	6	7
どのくらいで公共交通機関を利用しましたか?	0	1	2	3	4	5	6	7
どのくらいで自転車、スケートボード、スクーターを使用 しましたか?	0	1	2	3	4	5	6	7
どのくらいに場所まで歩いていましたか?	0	1	2	3	4	5	6	7

#### 4. あなたの家族で誰が現在、用事に最も頻繁に責任がありますか(食料品の買い物、家事、育児旅行など)?

図 わたし
 図 配偶者・パートナー
 図 家族の別の人
 図 家にいない人
 図 家族でみんな同じ責任
 図 オンラインショッピング
 図 答えがない

5. スーパーに行くのにどれくらいかかりますか。

 $\gg$ 

15分未満	🛛 15~30分	⊠ 30~45分	🛛 45分より	図 答えがない
-------	----------	----------	---------	---------

 $\boxtimes$ 

6. 下記のリストから、あなたがあなたにより容易に旅行をすると思うトップ3つのものを選んでください。
○ 車へのアクセス
○ 食料雑貨、医療その他の宅配便
○ 家族全員が利用できる乗車券
○ 子供向けの無料送迎
○ バスまたは電車の運行回数が多い
○ 近隣シャトルサービス
○ 無料送迎の 転送(Metro バスからMetro Railまで)
○ ユーバー、リフトのクレジット
○ 公衆トイレ、公共の座席、またはその他の設備へのアクセス
○ より良い歩道と通り
○ 私の家と私が行く必要があるところの間のより直接の通過サービス
○ 近所の自転車シェアステーション

#### 7. 近所を歩けなくなった理由は何ですか?(該当するものをすべて選択)

◎ 夜間の照明が不十分・日中は歩きやすい
 ◎ 状態の悪い歩道
 ◎ あまりに多くの人
 ◎ あまりに多くの車
 ◎ 犯罪が恐れ
 ◎ 近くで歩いて行く場所でない
 ◎ 安全でないと感じる通り横断
 ◎ 身体障がい者・あまり長く歩くことができません

 $\gg$ 

#### 8. この最後質問は、旅行についてです。以下の問題を読んでください、そして、あなたが常に同意するか、 時々同意するか、中立であるか、同意しないか、私に関係ありませんに答えて下さい。

					この件は、
		時々同意す	中立である	同意しない	私に関係あ
	同意するか	るか	か	か	りません。
私は、知らない人々の回りに不快であると感じます	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$
プライバシーは私にとって重要です	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$
私は、バスまたは電車で無事であると感じます	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$
私は、車または個人的な車両で無事であると感じます	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
私は、公共輸送期間を待って、無事であると感じます	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
0					
私は、近所を歩いて、無事であると感じます。	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\square$
私は、家の外にいるのが好きです。	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$
私は、他の人に会うとき、私は無事であると感じます	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$

	<b>同意する</b> か	<b>時々同意する</b> か	中 <b>立であ</b> るか	同意しな い <sup>か</sup>	この件は、 私に関係あ りません。
私は、ガス代は行く場所の数に影響	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$
私は、旅費は重荷である。	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$
私はお金を節約するために場所に歩いて行きます。	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
私は、公共交通機関を利用して交通費を節約。	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$	$\bowtie$
Lyft / Uber /タクシーは高価です!	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$
公共交通機関で行きたい場所や行きたい場所を見つけ るのが難しい。	$\boxtimes$	$\boxtimes$	$\boxtimes$	$\boxtimes$	

#### **Demographics**

9.何人が、あなたの家庭の中にいますか?\_\_\_\_\_

10. 何人が、5歳未満ですか。\_\_\_\_\_

- 11. 何人が年齢5と16の間にいますか。\_\_\_\_\_\_
- 12.17歳以上は何人ですか\_\_\_\_\_

13. どれくらいの車が、あなたの家庭の用途をしますか。\_\_\_\_\_

**14. あなたはcov19の前に仕事がありましたか。** 🛛 はい、フルタイムで 🛛 はい、アルバイト 🛛 いいえ

15. 仕事がありますか? 🛛 はい、フルタイムで 🖾 はい、アルバイト 🖾 いいえ、私は仕事から一時解雇されます 🖾 いいえ

16. 運転免許証がありますか。 🛛 はい 🛛 いいえ

 $\gg$ 

#### 17. 昨年の税引前世帯年収はいくらでしたか

🛛 25000未満	🛛 \$25,000 から \$50,000	⊠ \$50,000 から\$75,000
🛛 \$75,000 から \$100,000	⊠ 100,000以上	図 わからない・回答したくない

18. あなたの人種や民族性について次のうちのどれが当てはまりますか?

☑ 白人	🛛 アジアの人	🛛 アメリカ先住民
🛛 ヒスパニック系またはラテン 系	🛛 中東/北アフリカの人	
🛛 アフリカ系アメリカ人(黒人)	図 ハワイ先住民	

#### 19. あなたは何歳ですか

⊠ 0-17	🛛 18-29	🛛 30-39	⊠ 40-49	⊠ 50-59	⊠ 60-69	⊠ 70+
20. 貴方の性別は	なんですか?					
🛛 女性	☑ 男性	🛛 トラン	ィスジェンダー <b>(</b>	MTF)	🛛 トランスジェン	ダー (FTM)
<b>X</b> ジェ	ンダー・無性		図 その他		☑ 回答したく	くない

**21. あなたはセクシュアル・マイノリティ(LGBTQI+)ですか。レズビアン/ゲイ/バイセクシュアリティ/トランスジェンダ** ー/クィア/インターセックス 図はい 図いいえ 図回答したくない

22. あなたはどの種類のギフトカードが欲しいかについて選んでください。(注意:最初の1500人の参加者だけは、ギフトカードを受け取ります。)

◎ アマゾンのギフトカード ◎ ターゲットのギフトカード ◎ ギフトカードが欲しくない

23. ギフトカードが欲しかったは、E-メールアドレスを書してください。ギフトカードがほしくないは、n/aに答えてください。

24. 今週のラッフル賞を受賞した場合、どのように連絡しますか?メールアドレスと電話番号を入力してください。

Appendix A

#### LADOT Travel Behavior Questionnaire

Hi, is this \_\_\_\_?

Great! I am calling on behalf of <u>the Los Angeles Department of Transportation/Watts</u> <u>Century Latino Organization/Pacoima Beautiful</u> and I am calling because you completed the Changing Lanes survey and indicated your interest in participating in a 30 minute interview about your travel patterns.

We are pleased that you have agreed to help with this research by being interviewed. Your participation is entirely voluntary and you may choose not to answer any of our questions or to stop the interview for any reason. We promise to keep your information confidential and to reveal nothing about you personally. All the information you give us will be used for statistical purposes and you will not be identified in any of our reports. If you would like more information about this study, please let us know and we will provide you with the appropriate contact information.

Would you like to continue with the 30 minute interview now?

If yes: Great! Do you have any questions before we proceed with the interview?

If no, call back later: Thanks for letting me know. When is a good time to call you back?

**If no, no longer interested**: Thank you for letting me know and for taking the Changing Lanes survey.

First, I'm going to ask a few questions about yourself and your household. This will help make sure we know which questions to ask or skip throughout our interview.

- 1. What is your zip code?
- 2. How many people, including you, live in your household?
- 3. How many people in your household are under age 5?
- 4. How many people in your household are between the ages 5-16?
- 5. How many other people in your household have a driver's license?
- 6. Do you have a driver's license?
- 7. How many vehicles are owned, leased, or available for regular use by the people who currently live in your household? \_\_\_\_\_
- 8. Before the pandemic, were you employed?
  - 1. Yes, full time
  - 2. Yes, part-time
  - 3. No
- 9. Are you working now?
  - 1. Yes, full time

- 2. Yes, part-time
- 3. No, I'm furloughed from my job
- 4. No

10. How old are you? [enumerator select appropriate range]

- 1. 16 19
- 2. 20-29
- 3. 30 39
- 4. 40-49
- 5. 50-59
- 6. 60-70

≫

7. 70+

Question	What to Record	Response
Are you currently working at your job location or from your home?	Job, home	
[If working from home] Did you work from home before the pandemic?	Yes/No	
[skip logic: if working from home skip to next section]		
What day of the week did you last work?	Day of the week/Time to nearest hour	
On that day, what time did you leave for to work?		
Where did you leave from? (type of place: ex. home)	Location	
Did you make any stops on the way to your job?	Y/N	
How do you typically get to work?	<ul> <li>(1) Travel mode(s):</li> <li>A. I drove myself</li> <li>B. A passenger in a car</li> <li>C. Walk</li> <li>D. Public transit</li> <li>E. Bike</li> <li>F. Uber/lyft/taxi</li> <li>G. Other</li> </ul>	

## [If the interviewee is not working now, skip this section] First, I'm going to ask you some questions about trips to work

Do you take the same mode to work every day?	(2) Y/N	
The last time you went to work, how long did it take you to get there?	[coding instructions, they can answer in a number and then record the category] < 15 minutes; 15-29 minutes; 30-44 minutes; 45-59 minutes; 1+ hour	
On your last work day, when you finished work, where did you go? (examples: home, grocery store, pharmacy, family member's house, children's school, child care, etc.)	Trip destination	
How many days per week do you go to work?	Number of days, 0-7, (per week)	
Does your employer provide vanpool or carpool service? [ask, if yes] Have you ever used it before?	1. Y/N/Don't know 2. Y/N	

## These next questions I'm going to ask you are about grocery shopping

Question	What to Record	Response
----------	----------------	----------

Are you responsible for grocery shopping for your household? Have you gone grocery shopping (in person or online) in the last month?	<ol> <li>Y/N/I share these responsibilities with someone else</li> <li>Y/N</li> </ol>
(if not within the last month, skip to next section)	
If yes, what day of the week did you last go grocery shopping? Was it in-person or online? What time of day was it?	<ol> <li>Day of week</li> <li>In-person or online</li> <li>Time of day</li> </ol>
(If they grocery shopped online) Did you order your groceries online before	Y/N
the pandemic? (skip rest of section after)	
The last time you went to the grocery store, where did you leave from?	Location
How did you get there?	Travel mode(s): A. I drove myself B. A passenger in a car C. Walked D. Took public transit E. Biked F. Uber/lyft/taxi G. Other
How long did it take you to get to the grocery store?	[coding instructions, they can answer in a number and then record the category]

	< 15 minutes; 15-29 minutes; 30-44 minutes; 45-59 minutes; 1+ hour	
How many people were with you (including yourself) on this grocery trip?	Number of people	
When you finished shopping, where did you go next?	Trip destination	
How often do you go grocery shopping, in-person or online?	Frequency (per week or per month)	
How often are you going grocery shopping now compared to before the pandemic? More, less, or the same?	More, less, or the same	

#### Medical Care

### The next set of questions are about medical care.

Question	What to Record	Respon se
Have you had a medical appointment in the last month? This may include a doctor/therapist/physical therapist appointment and may be an appointment for someone else that you took them to or attended with them.	Y/N	
(if no trip in the last month, skip to last question of this section)		
If yes, what day of the week and time period of day was the appointment?	Day of week, time period of day: Early	
Was it in-person or online/on the telephone?	morning (before 8:00 AM), Morning (8:00	

(If appointment was online, skip out of section)	AM to Noon), Afternoon (Noon to 4:00 PM), Early evening (4:00 PM to 7:00 PM), Evening (late than 7:00 PM) In-person / online	
Who was this appointment for? (prompts: yourself, someone else, both)	Me, someone else, both	
If the appointment was for yourself, was anyone with you? If the appointment was for someone else, did anyone go with you and the patient? (spouse/partner; children, other family member, friend, other)	Spouse/partner, children, other family member, friend, other	
Where did you leave from? (Type of location, such as home, work, etc.)	Location	
How did you get there?	Travel mode(s): A. I drove myself B. A passenger in a car C. Walk D. Public transit E. Bike F. Uber/lyft/taxi G. Other	
How long did it take you to get to the appointment?	[coding instructions, they can answer in a number and then record the category]	

	< 15 minutes; 15-29 minutes; 30-44 minutes; 45-59 minutes; 1+ hour	
When you finished, where did you go next?	Trip destination (add options, home, work, etc, other_)	
How often do you make healthcare-related trips? (times per year, or times per month)	Frequency	
Have you deferred or delayed medical treatment during the COVID-19 pandemic? If yes, why?	Y, N <open ended<br="">response&gt;</open>	

#### Childcare

Next we are going to ask you about childcare related questions for all children under 5. We will ask about school trips after this section for any children over 5.

	<u> </u>						
1	()nl\	/ ask it there	are children	under 5 in	the home	) It not si	(in to next section
	(Unit)		are ormateri			<i>)</i> II 1101, 01	ap to next beotion.

Question	What to Record	Response
Are you ever responsible for childcare drop-off or pick up?	Yes or no or sometimes	
<ul> <li>(if yes to above), What days of the week do you typically take your child or children to childcare?</li> <li>What time of day do you typically take your child or children to childcare?</li> <li>Please share all the times you typically take your child or children to childcare</li> <li>Last time you took your child/ren to childcare, where did you leave from?</li> </ul>	day of week Time of day (short answer to account for multiple times if children go at different times) Departure destination	
Where is your childcare/pre-school located? (Options:In walking distance from home, further than walking distance away)	In walking distance from home, further than walking distance away	
How did you get there?	Travel mode(s) H. I drove myself I. A passenger in a car	

 $\gg$ 

	J. Walk K. Public transit L. Bike M. Uber/lyft/taxi N. Other	
How long did it take you to get to your child care location?	[coding instructions, they can answer in a number and then record the category] < 15 minutes; 15-29 minutes; 30-44 minutes; 45-59 minutes; 1+ hour	
When you dropped the child off, where did you go next?	Trip destination	
How many times per week do you drop your child at childcare now?	Frequency (per week)	
How often are you taking your child to care compared to before the pandemic? More, less, or the same	More, less, or the same	
Has any of this changed during the pandemic?	Check box: <ul> <li>Location changed</li> <li>I go home after drop-off or pick-up rather than going to work after drop off or pick-up</li> <li>Time of drop-off/pick-up</li> <li>Other</li> </ul>	

#### School trips

## (Screening question - Were you or children in your household between age 5-18 enrolled in school last year? If none, skip to next section)

#### Now I'm going to ask you a set of questions about trips to school last year

Question	What to Record	Response
Who is/was responsible for school dropoff/pick up? (myself, school bus, public bus, parent, grandparent, other family member, friend?)	Person: myself, spouse/significant other, shared with spouse/significant other, school bus, public bus, parent, grandparent, other family member, friend, other: write in answer	
How do/did you get there?/ How did the student get the school?	Travel mode(s) A. I drove myself/Dro ve themselve s B. A passenger in a car C. Walk D. Public transit E. Bike F. Uber/lyft/ta xi G. Other	
(If the interviewee is/was the primary person responsible for school travel) When you take yourself	Place / Destination	

or the student to school, where do/did you usually go afterward?		
How many times per week do/did you/your children get dropped off at school?	Frequency (per week)	
How long did it take you or your children to get to school (answer for now, if going to school currently, answer how long it took pre-pandemic if not going to school currently)?	[coding instructions, they can answer in a number and then record the category] < 15 minutes; 15-29 minutes; 30-44 minutes; 45-59 minutes; 1+ hour	

### Recreation (Movie theater/Play/Museum/Concert/Park/etc.) or Visiting Friends/Family

## Now I'm going to ask you a set of question about trips for recreation or visiting friends/family

Question	What to Record	Response
When did you last take a trip for entertainment/socializing/recreation, such as, meeting friends or family somewhere outdoors or visiting in a park? Where did you leave from?	Time to nearest hour Day of week Starting location	
Where did you go?	Type of Destination	
How did you get there?	Travel mode(s) A. I drove myself B. A passenger in a car C. Walk D. Public transit E. Bike F. Uber/lyft/taxi G. Other	
How long did it take you to get there?	[coding instructions, they can answer in a number and then record the category] < 15 minutes; 15-29 minutes; 30-44 minutes; 45-59 minutes; 1+ hour	
Who was with you on this trip? (spouse/partner; children, other family member, friend)	Passengers	

When you finished your activity, where did you go next?	Trip destination	
Before the pandemic, how often (number of times per week/month) did you take trips for entertainment/socializing/recreational purposes?	Frequency (per week/month)	
How often are you going out for entertainment/socializing/recreation trips during the pandemic (i.e. now)?	Frequency (per week/month)	

#### **Additional Questions**

- 1. Besides the trips I already asked about, are there any other trips that you are regularly making during the pandemic? (Prompts: post office, laundromat) In addition to these, are there any other trips that you made regularly before the pandemic?
- 2. Do you have a smartphone? (Yes/No) Do you have an unlimited data plan? (Y/N)
- 3. Do you have access to the internet at home? Y/N
- 4. Do you have access to a computer at home? Y/N
- 5. Have you ever used Uber or Lyft? (Yes/No) How often were you using these services before the pandemic? (Frequency; never, every day, a few times per week, a few times per month, a few times per year, other) How often are you using them now? (Frequency; never, every day, a few times per week, a few times per month, a few times per year, other)
- 6. If you have a smartphone but have not used Uber or Lyft, why not?
- 7. Have you ever heard of Cityride or Dial-a-ride services? (Yes/No) If yes, have you used them before?
- 8. In the last seven days, how many days did you take public transit?
- 9. Before the pandemic, how many days per week would you typically take public transit?
- 10. What are the advantages or benefits of using transit?
- 11. What are the challenges of using transit?

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- 12. Disregarding pandemic-related health concerns, do you ever fear for your safety on public transit? (Note: In this case "safety" does not include fear of illness related to the pandemic) Do you have concerns about contracting COVID-19 while riding public transit?
- 13. Typically, do you pay in cash per ride, use a TAP card with loaded fare, or a monthly pass?
- 14. Are you or have you previously been enrolled in any low-income fare programs? Y/N
- 15. (Only ask if they have children under 16 in their home) How often do the children in your home travel independently (without a parent or guardian)? Are there certain types of trips or times of day when they travel alone?
- 16. Are you able to walk for more than fifteen minutes at a time? Y/N If you do not walk for more than 15 minutes at a time or avoid walking far distances, why so?

- 17. Not considering traveling with children in strollers, how often do you make trips with someone with a physical disability? (always, frequently, rarely, never)
- 18. (Ask follow up if more than never) Are there any particular considerations you need to make during trips with that person?
- 19. Do you think your neighborhood has all of your daily destinations (such as the grocery store, pharmacy, childcare, school) within a convenient walking distance? (yes, mostly, somewhat, not really)
- 20. This is my last question about your trips and travel, I've asked about a lot of different types of trips and how you get around. Do you feel like there are trips that you'd like to take but don't because getting there is too difficult? To what kinds of destinations?

#### Additional Demographics

Now I'm going to ask some demographic questions.

- 1. Please indicate your gender
  - a. Female
  - b. Male
  - c. Transgender female
  - d. Transgender male
  - e. Other
  - f. Prefer not to say
- 2. Please indicate if you are LGBTQI (Lesbian/Gay/Bisexual/Transgender/Queer/Intersex)?
  - a. Yes
  - b. No
  - c. Prefer not to say
- 3. What was your annual household income before taxes last year (in 2019?)?
  - a. Under \$25,000
  - b. \$25,000 \$50,000
  - c. \$50,000 \$75,000
  - d. \$75,000 \$100,000
  - e. \$100,00 and over
  - f. Don't know/prefer not to answer
- 4. How would you describe your race/ethnicity? (check all that apply)
  - a. White (non-Hispanic)
  - b. Hispanic / Latinx
  - c. Black
  - d. Asian
  - e. Middle-eastern / North African
  - f. Native Hawaiian / Pacific Islander
  - g. Native American
  - h. Prefer not to say
  - i. Other \_\_\_\_

 $\twoheadrightarrow$ 

5. How would you like to receive a gift card for your participation in today's interview?

- a. E-gift card sent to my email address
- b. Mailed physical gift card
- c. Pick up at Watts Century Latino Organization/PB
- d. I would not like a \$35 gift card/e-gift card

a gender equity transportation study



February, 2020







#### **KOUNKUEY DESIGN INITIATIVE**

Chelina Odbert, Executive Director

Jerome Chou, Planning Director

Naria Kiani, Senior Planning Coordinator

Carolyn Angius, Planning Associate

Adriana Carías, Landscape Design Coordinator



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#### **E** TOOLE DESIGN GROUP

Tamika L. Butler, Esq., Director of Planning + Equity and Inclusion

Jessica Schoner, PhD, Senior Researcher, Senior Planner

Laura Krull, Planner, GIS Analyst

### UCLA - AFFILIATED RESEARCHERS

Anastasia Loukaitou-Sideris, PhD, Professor of Urban Planning

Evelyn Blumenberg, PhD, Professor of Urban Planning

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Madeline Brozen, Deputy Director, Lewis Center

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### **Changing Lanes: A Gender Equity Transportation Study**

analyzes three neighborhoods from across the city of Los Angeles, collecting a variety of qualitative and quantitative sources of data to understand the travel needs of women, girls, and gender minorities. The three neighborhoods selected are Sawtelle in West Los Angeles, Sun Valley in the San Fernando Valley, and Watts in Central Los Angeles. The neighborhoods were selected to represent a spectrum of income and destination density characteristics as well as a cross section of Los Angeles geography. Below is a list of the neighborhoods according to these characteristics:

- 1. Low income + low destination density = Sun Valley
- 2. Low income + high destination density = Watts
- 3. Medium income + high destination density = Sawtelle

The selection process for identifying these three neighborhoods was previously described in a separate memo.

This report utilizes datasets available from the City of LA and other sources and describes their relevance for the study and selected neighborhoods. Additionally, it includes neighborhood-specific key findings about the demographics and existing conditions for travel.

Data sources include LADOT, Metro, Trust for Public Land (TPL), Bureau of Street Services (BSS), Bureau of Engineering (BOE), and Bureau of Street Lighting (BSL). through summarize the datasets, including whether the data can be broken out by gender and study area. Since no datasets both spatially overlapped with the study area and could be disaggregated by gender, we included relevant non-gendered data in this analysis. Datasets without a gender dimension such as transit facilities and service—are useful for analyzing how well served the study areas are compared to each other or to other neighborhoods. This report includes datasets that are relevant for this existing conditions analysis, as well as datasets that will be useful for the final report and future analyses.

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Since no datasets both spatially overlapped with the study area and could be disaggregated by gender, we included relevant nongendered data in this analysis.




### **Opportunities for More Gender-Inclusive Data**

LADOT should include gender in all data collection and program evaluation efforts. Specific recommendations for doing so in new and ongoing efforts include:

### **Active Transportation**

• **Annual bicycle and pedestrian counts** – As LADOT sets up their annual counting program, they should ensure that perceived gender is always collected as part of manually collected counts. Individuals collecting the data can make observations of gender as well as collecting information about people traveling with children and other dependents.

### **Public transit**

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• **DASH on-board surveys** – LADOT contractors perform rider surveys on their DASH service every two years, with the most recent data available online from 2016. While the overview explains the purpose of the survey to "examine trend travel characteristics, rider characteristics, [and] service ratings" the online reports contain no gender information. LADOT can request contractors look at trends by gender. LADOT can request that contractors use inclusive language to ask about gender in the survey.

• **CityRide ridership** - LADOT can collect and analyze data on CityRide services like Dial-A-Ride (DAR) and taxi rides. CityRide provides low-cost, on-demand rides to those of lower-income, older age, and limited mobility, many of whom may be disproportionately transit dependent. DAR offers trips that are less than 10 miles from a rider's home, which may make it a particulary rich source of information about neighborhood travel patterns and the shorter trips that match many womens' travel patterns.

• **LAnow** - LAnow also provides on-demand transportation close to home. LADOT should collect data to better understand how LAnow serves riders of all genders.

### Project and program evaluation criteria

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• **Consultant collected surveys** – LADOT and other LA City agencies, including the Mayor's office, regularly hire consultants to collect pre- and post-installation surveys for various projects. This includes projects like the Great Streets Program and Broadway Dress Rehearsal. Collecting and disaggregating gender can be a key element as the department establishes project evaluation criteria and hires consultants to collect data.

Perceived gender in this context means whatever gender the person conducting the manual count assumes for the people counted. It is imperfect and does not capture the full spectrum of non-binary and other gender minorities, but the data do provide a useful reference for examining gendered patterns, such as the known gender gap in bicycling.
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### **Table 1. Dataset Summary: Demographics**

DATASET <sup>2</sup>	DISAGGREGATE BY GENDER?	DISAGGREGATE BY STUDY AREA?	POTENTIAL QUESTIONS FOR DATA
BIKE/PED COUNT LOCATIONS 2019	Νο	<b>No</b> 2019 locations in study neighborhood; some potentially nearby – especially near Sawtelle	How many people are out walking and biking near places reported by survey participants? ("Eyes on the street")
BIKE/PED COUNTS 2009-2017	Νο	Yes	How many people are out walking and biking in the study neighborhoods? How many people are out walking near places reported by survey participants? ("Eyes on the street")
LADOT EMPLOYEE HIRES	Yes	N/A - Not spatial data	What is the gender gap in hires?
LADOT PLANNER/ ENGINEER HIRES	Yes	N/A - Not spatial data	What is the gender gap in planning and engineering?
TRAFFIC INJURIES	Yes	Yes	Are women disproportionately affected by traffic crashes/injuries? How prevalent are they in the study neighborhoods and near the places survey participants report going?

### Table 2. Dataset Summary: Existing Transportation Services

DATASET	DISAGGREGATE BY GENDER?	DISAGGREGATE BY STUDY AREA?	QUESTIONS FOR DATA
DASH ROUTES	<b>Yes</b> (only Watts is in the service area)	<b>Yes</b> (only Watts is in the service area)	How is transit serving study neighborhoods and the places survey participants report going?
DASH STOPS	<b>Yes</b> (only Watts is in the service area)	<b>Yes</b> (only Watts is in the service area)	How is transit serving study neighborhoods and the places survey participants report going?
METRO BIKE SHARE STATION LOCATIONS	N/A	<b>No</b> - bike share locations in study neighborhoods; some stations near Sawtelle	How is bike share serving study neighborhoods and the places survey participants report going?
MOBILITY HUBS	N/A	Νο	Are mobility hubs present in study neighborhoods and the places survey participants report going?
CITY RIDE	No	Yes	Who does CityRide serve and what destinations does CityRide serve?
DOCKLESS MOBILITY	Yes	Yes	What destinations do dockless mobility options serve? Who utilizes dockless mobility options and how?

All datasets not cited to an external source was generated by LADOT. 2

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### Table 3. Dataset Summary: Geographic Data

DATASET	DISAGGREGATE BY GENDER?	DISAGGREGATE BY STUDY AREA?	POTENTIAL QUESTIONS FOR DATA
LADOT INTERSECTION PRIORITIZATION SCORES	N/A	Yes	
NEIGHBORHOODS CONSIDERED SAFE FOR WALKING	N/A	Yes	How safe are areas women travel/the study areas for walking?
NEIGHBORHOODS CONSIDERED SAFE FROM CRIME	N/A	Yes	How much crime exists in areas women travel/the study areas?
NEIGHBORHOODS WITHOUT WALKING ACCESS TO PUBLIC SPACE	N/A	Yes	How much public space access do areas where women travel/the study areas have?
SRTS (SAFE ROUTES TO SCHOOL) <sup>3</sup> TOP 100	N/A	Only in <b>Watts</b>	If women are walking their children to school more, are SRTS projects also in areas where women are traveling/the study areas?
LADOT TRAVEL BEHAVIOR ZONES (TBZ) <sup>4</sup>	N/A	Yes	Are places that women travel and the study neighborhoods adequately represented in this type of composite index?
LADOT WALKABILITY INDEX SCORE, (2012)	N/A	Yes	How walkable are areas that women travel/ the study areas?
TPL CLIMATE-SMART CITIES OVERALL CONNECT PRIORITIES⁵	N/A	Yes	Assess the priority levels for green infrastructure in areas women travel/the study areas – does the scoring method end up prioritizing investment in areas women travel?

3 The SRTS Top 100 is a list of the 100 top priority LAUSD schools in need of Safe Routes to School safety improvements.

4 Travel Behavior Zone is based on land use characteristics of the location. They were developed by the City of Los Angeles as a categorization method to help estimate the VMT and single-occupant vehicle trip reductions of Transportation Demand Management (TDM) measures. These zones are determined by six variables: population density, daytime population density, land use entropy score, intersection density, distance to nearest fixed guideway stations and distance to nearest major bus stop. The scores are calculated and then grouped into four zones.

5 The Trust for Public Land's Climate-Smart Cities Program responds to climate change by weaving green elements into the built environment. This dataset assesses a city's priority sites for green infrastructure development, from 0-5 (low value to very high priority for green infrastructure).

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### Table 4. Dataset Summary: Geographic Data

DATASET	DISAGGREGATE BY GENDER?	DISAGGREGATE BY STUDY AREA?	POTENTIAL QUESTIONS FOR DATA
ALLEYS <sup>6</sup>	N/A	Yes	
BIKEWAYS	N/A	Yes	Are bikeways serving study neighborhoods and the places survey participants report going?
BUS BENCHES <sup>7</sup>	N/A	Yes	Are bus benches available in study neighborhoods and the places survey participants report going?
CROSSWALKS	N/A	Yes	Are crosswalks available in study neighborhoods and the places survey participants report going?
HIGH INJURY NETWORK	N/A	Yes	Are High Injury Network segments disproportionately present in study neighborhoods or in areas where survey participants report going?
BUS SHELTER LOCATIONS <sup>8</sup>	N/A	Yes	Are bus shelters available in study neighborhoods and the places survey participants report going?
PAVEMENT CONDITION	N/A	Yes	How is the pavement condition in areas women travel/the study areas?
PREFERENTIAL PARKING (/SQMI)	N/A	Only in <b>Sawtelle,</b> and slightly in <b>Sun Valley</b>	How do the preferential parking locations affect the areas where women travel/the study areas?
SIGNAL LOCATIONS	N/A	Yes	Do signalization patterns differ in areas women travel/the study areas?
SPEED LIMITS	N/A	Yes	Do speed limits differ in areas women travel/the study areas?
SRTS (PLANNED AND INSTALLED)	N/A	Only in <b>Watts</b>	If women are walking their children to school more, are SRTS projects also in areas where women are traveling/ the study areas?
STOP AND YIELD SIGNS	N/A	Yes	Are there stop and yield signs in areas women travel/ the study area at the same proportion as other neighborhoods?
STREETLIGHTS <sup>®</sup>	N/A	Yes	Is lighting sufficient in areas women travel/the study area?
STREETS CENTERLINES	N/A	Yes	Useful for performing other analyses like level of traffic stress
VISION ZERO INSTALLED/PLANNED	N/A	Yes	Are Vision Zero projects planned/installed in areas women travel/the study areas at the same proportion as other neighborhoods

6 Data provided by City of Los Angeles Bureau of Engineering.

- 7 Data provided by City of Los Angeles Bureau of Street Services.
- 8 Ibid.

9 Data provided by City of Los Angeles Bureau of Street Lighting.

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This analysis is divided into four sections. First, we review demographic characteristics of the three study neighborhoods. Next, we look at transport service areas and infrastructure (e.g., transit), followed by built environment characteristics. Finally, we review traffic safety characteristics.

Many of the datasets reviewed contain no relevant or meaningful gender dimension (e.g., traffic lights), and instead must be analyzed spatially. In later phases of the project, we can potentially analyze the relationship between the distribution of infrastructure and gendered travel patterns.

Some of these datasets reflect the ways in which the City of Los Angeles prioritizes and evaluates investments. These include, for example, Safe Routes to School Top 100, Vision Zero planned or installed projects, identified priority zones or corridors, among others. An evaluation of these datasets relative to gender and travel needs during this study will illuminate whether City prioritization algorithms and processes fairly represent the needs of women, girls, and gender minorities.

By analyzing the provision of transportation services and boundaries, we can see the differences between neighborhoods and how these differences may provide or constrain women's mobility in the selected neighborhoods.

Depending on the data source, where sex or gender can be considered, its definition is limited by how the construct was defined in the original data. For example, the US Census Bureau collects survey respondents' self-reported sex, in which the respondent may only choose from "male" or "female." This limits our ability to understand unique travel needs and concerns for people who fall outside a cisgender binary.

The lack of data that disaggregates by gender will make robust analysis of women's travel behavior difficult. Some comparison between geographic areas can be done, but priority should be in finding additional datasets that have additional gender specific attributes.

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An evaluation of these datasets relative to gender and travel needs will illuminate whether City prioritization algorithms and processes fairly represent the needs of women, girls, and gender minorities.

## **Neighborhood Demographics**

The three study neighborhoods were chosen to represent a demographically varied cross section of Los Angeles. As noted earlier, Sawtelle was identified as a medium-income neighborhood, while Sun Valley and Watts were identified as lower-income neighborhoods.

Table 5 describes general demographic characteristics for the three study neighborhoods and the average of all neighborhoods in Los Angeles. Sun Valley, with its larger area, has the largest population, number of households and non- white population, all well over the neighborhood average for all neighborhoods in Los Angeles. Sun Valley and Watts have high Hispanic/Latino population. Watts has a high Black population and a very low white (non-Hispanic/Latino) population.

While Sun Valley has the highest population and number of households, Watts has the largest average household size. Watts and Sun Valley both have average household sizes above the citywide neighborhood average. Watts has a significantly younger population, both for males and females, than the citywide neighborhood average, while Sun Valley and Sawtelle have close to the citywide average. Overall, women have a slightly higher average age than men in each neighborhood, which is not surprising given that women have a higher life expectancy than men. Watts has a significantly higher rate of female householders with no husband present for family households, at nearly double the citywide average, while Sun Valley and Sawtelle have close to the citywide average. The percentage of family households with female householders without a husband was higher than the share of male householders without a wife for all three study areas and the citywide average.

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### **Table 5. General Demographic Profiles**

	SAWTELLE	SUN VALLEY	WATTS	LA NEIGHBORHOOD AVERAGE <sup>10</sup>
POPULATION	39,963	71,855	42,652	33,980
AREA (SQMI)	2.69	9.42	2.12	-
POPULATION DENSITY (PEOPLE/SQMI)	14,856	7,627	20,118	-
RACE/ETHNICITY HISPANIC/ LATINO WHITE BLACK ASIAN OTHER/TWO+ RACES	5.4% 20.6% 22.3% 3.3%	6.5% 1.3% 1.9% 71.0% 19.2%	0.7% 2.8% 23.0% 74.3% 0.8%	11.2% 2.6% 9.2% 46.4% 30.4%

#### **HOUSEHOLD AND FAMILIES**

NUMBER OF HOUSEHOLDS	18,470	19,234	9,681	1,344,402
AVERAGE HOUSEHOLD SIZE	2.3	3.7	4.4	2.88
TOTAL FAMILY	<b>6,994</b>	<b>14,572</b>	<b>7,786</b>	<b>890,543</b>
HOUSEHOLDS	37.9%	75.8%	80.4%	66.2%
FEMALE-HEAD	<b>1,216</b>	<b>3,409</b>	<b>3,324</b>	<b>214,473</b>
HOUSEHOLDS	17.4%	23.4%	42.7%	24.1%
MALE-HEAD	<b>574</b>	<b>1,873</b>	<b>952</b>	<b>98,813</b>
HOUSEHOLDS	8.2%	12.9%	12.2%	11.1%

### AVERAGE AGE

ALL POPULATION	34.1	34.7	25.6	36.4
FEMALES	34.5	35.5	26.6	37.3
MALES	33.7	34.3	24.3	35.4

10 Neighborhood average is calculated by summing the total for a variable and then dividing by the number of neighborhoods (110). It is inclusive of the study area neighborhoods.

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Table 6 describes economic and employment characteristics for the study neighborhoods and the city at large. Sawtelle and Sun Valley have higher than the city-wide neighborhood average for total number of female workers, but all three study areas have approximately the same percentage of female workers as the neighborhood average.

Median personal earnings are lower for female workers than their male counterparts, for all three study areas and the neighborhood average. Watts has the lowest personal earnings for all workers and the lowest median household income. Median personal earnings for female workers, expressed as a ratio to that of male workers, was higher in all three study neighborhoods than the city-wide neighborhood average, and higher in Sawtelle than the two lower income neighborhoods. Generally, female head of householders with no husband had a lower median household income than their male counterpart, except in Sawtelle, where the female head of householders had a household income significantly higher than male head of households with no wife present.

While Watts and Sun Valley were both selected to represent neighborhoods with incomes in the lowest tercile citywide, the median household income in Sun Valley is about 50% higher than in Watts. When considering the larger average household sizes in Watts, this lower household income becomes even more striking.

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### **Table 6. Economic and Employment Profiles**

	SAWTELLE	SUN VALLEY	WATTS	LA NEIGHBORHOOD AVERAGE"
		WORKERS		
TOTAL WORKERS	25,051	31,305	13,585	18,674
FEMALE WORKERS	<b>11,313</b> 45.2%	<b>13,540</b> 43.3%	<b>5,965</b> 43.9%	<b>8,452</b> 45.3%
	MEDIAN	PERSONAL EARNINGS		
	¢ 47.016	¢04.700	¢10.044	¢24.702

ALL WORKERS	\$47,016	\$24,706	\$19,044	\$34,762
FEMALE WORKERS	\$44,664	\$21,974	\$16,417	\$29,910
MALE WORKERS	\$50,419	\$27,344	\$20,394	\$40,361
RATIO OF FEMALE TO MALE EARNINGS	0.89	0.80	0.80	0.74

#### **MEDIAN HOUSEHOLD INCOME**

ALL HOUSEHOLDS	\$76,036	\$47,723	\$30,398	\$63,570
ALL FAMILY HOUSEHOLDS	\$94,222	\$52,121	\$32,918	\$74,938
FAMILY: FEMALE HEAD OF HH	\$70,037	\$45,264	\$23,419	\$46,255
FAMILY: MALE HEAD OF HH	\$45,741	\$50,705	\$38,645	\$62,401

11 Neighborhood average is calculated by summing the total for a variable and then dividing by the number of neighborhoods (110). It is inclusive of the study area neighborhoods.

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Table 7 describes commuting and transport characteristics of the three study neighborhoods. Commute duration is lower than the neighborhood average for Sawtelle, and slightly above average in Watts. Across the three study areas, female worker average commute time is close to the commute duration for all workers (male and female), with no clear patterns of one sex having a systematically longer commute. Notably, the way "commute" is defined may exclude commute-related or commute-essential components of a trip chain, such as dropping children off at childcare.

The journey to work data by mode share shows both the female percentage and the total percent (female and male combined), as a comparison. Across the three study areas, women drive and take transit to work at higher rates than the average for their respective study areas, and are less likely to walk or bike to work in the three study neighborhoods – consistent with existing literature about a modest gender gap in walking and a larger, more persistent gender gap in bicycling. Additionally, Watts has a higher-than-city-wide average transit mode share.

Watts has the largest share of zero car households (18.3%), double and triple the shares for Sawtelle and Sun Valley respectively. Watts also has the largest percent of female workers living in zero car households. Sun Valley, as the study neighborhood selected to represent areas with lower destination densities, has the lowest shares of zero car households and female workers living in zero car households.

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Notably, the way "commute" is defined may exclude commute-related or commuteessential components of a trip chain, such as dropping children off at childcare.

### **Table 7. Transportation Profiles**

	SAWTELLE	SUN VALLEY	WATTS	LA NEIGHBORHOOD AVERAGE <sup>12</sup>
	AVERAGE CON	IMUTE DURATION (MI	NUTES)	
ALL WORKERS	24.5	29.6	34.9	30.6
FEMALE WORKERS	23.9	30.8	33.1	30.2
	JOURNEY	TO WORK MODE SHAI	RE	
FEMALE VEHICLE TRANSIT WALK BIKE OTHER WORK FROM HOME	1.8% 4.2% 77.7% 8.8% 4.3% 1.8%	1.8% 9.2% 84.0%	0.8% 0.8% 77.0% 14.9% 11% 0.8% 14.4% 2.7%	0.6% 3.9% 77.2% 9.9% 1.2% 17% 6.2%
TOTAL VEHICLE TRANSIT WALK BIKE OTHER WORK FROM HOME	5.4%	7.3% 86.2%	79.6%	9.2%

#### **HOUSEHOLD CAR ACCESS**

ZERO CAR HOUSEHOLDS <sup>13</sup>	<b>1,657</b>	<b>1,1179</b>	<b>1,174</b>	<b>1,633</b>
	9.0%	6.1%	18.3%	13.8%
FEMALE WORKERS IN ZERO	<b>520</b>	<b>515</b>	<b>594</b>	<b>37.3</b>
CAR HH <sup>14</sup>	4.6%	3.8%	10.0%	5.9%

- 12 Neighborhood average is calculated by summing the total for a variable and then dividing by the number of neighborhoods (110). It is inclusive of the study area neighborhoods.
- 13 Percent calculated as the number of zero-car households, divided by the total number of households (see Table 5).
- 14 Percent calculated as the number of female workers in zero car households, divided by the total number of female workers (see Table 6).

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### Transport Service Areas and Infrastructure

All study neighborhoods are served by Metro routes, bus routes, and previous bicycle/pedestrian count locations. However, DASH and Metro bike share service areas only partially serve the study neighborhoods. DASH is available only in Watts, which was selected as the "low income, high destination density" study neighborhood. Watts is also the only neighborhood served by light rail transit (Blue Line LRT makes one stop in Watts and one nearby and the Green Line LRT is nearby) and nearby bus rapid transit.

CityRide provides subsidized shuttle and taxi service for qualified riders citywide, but use is disproprionate: ridership in Watts and Sawtelle is roughly 3 and 3.5 times higher than in Sun Valley, respectively. There are no bike share stations in any of the study neighborhoods, but there are some stations near Sawtelle. Dockless mobility options are also most available in Sawtelle although the exact locations of e-bikes and e-scooters vary, they are generally concentrated around Downtown and neighborhoods to its west, including Sawtelle, and are unavailable in Watts and Sun Valley. Dockless mobility ridership may also be unevenly distributed across genders—almost 70% of recently surveyed riders identified as male.

Sawtelle was selected as the "middle income, high destination density" study neighborhood and is served by various Metro services, as well as a City of Santa Monica Big Blue Bus line and a nearby Culver City bus line. Sun Valley, which was selected as lower in income and destination density, has neither DASH nor bike share service. Preferential parking districts are present in Sawtelle only. Table 8 summarizes existing transportation services and infrastructure, according to study area income and destination density. Table 9 summarizes existing transportation services in the study areas and city. Considering Table 8 and 9 together, we would expect Sawtelle and Watts, given their high destination density, to have more transportation infrastructure than Sun Valley, which has low destination density. While Sun Valley has many Metro lines, bus stops and bus lines, it is also a large neighborhood geographically, almost double the size of Sawtelle and Watts.

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### *Table 8.* Matrix of Existing Transport Service Areas and Infrastructure Presence by Study Area



- 15 Metro Local bus lines include Lines 1-96, 102-292, Metro Community Circulator Lines 603-687. Big Blue Bus and Culver Citybus are listed separately where applicable.
- 16 Rapid bus lines include Metro limited or express lines (lines 344 through 577 and 788), Metro Rapid Lines (lines 704-794, except line 788, and lines 901-910), and the Metro G (Orange) and J (Silver) lines.
- 17 Light rail service include the A (Blue), B (Red), C (Green), D (Purple), E (Expo), and L (Gold).

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### Table 9. Existing Transportation Services

	SAWTELLE	SUN VALLEY	WATTS	LA NEIGHBORHOOD AVERAGE <sup>18</sup>
PREFERENTIAL PARKING DISTRICTS (/SQMI)	0.3	_	-	0.11
BIKE SHARE STATIONS	-	_	-	1.1
DASH STOPS	—	-	46	14.4
DASH ROUTES	—	-	2	1.7
LIGHT RAIL ROUTES <sup>19</sup>	-	-	1	0.3
LIGHT RAIL STOPS	-	-	1	1.2
RAPID BUS LINES <sup>20</sup>	4	1	-	2.2
RAPID BUS STOPS	11	10	_	7.6
LOCAL BUS LINES <sup>21</sup>	3	10	6	5.8
LOCAL BUS STOPS <sup>22</sup>	28	168	65	65.8
PED/BIKE COUNT LOCATIONS 2009-17	2	1	4	1.4
PED/BIKE COUNT LOCATIONS 2019	1	-	-	0.5
CITYRIDE	478	666	363	-

18 Neighborhood average is calculated by summing the total for a variable and then dividing by the number of neighborhoods (110). It is inclusive of the study area neighborhoods.

19 Light rail routes include the A (Blue), B (Red), C (Green), D (Purple), E (Expo), and L (Gold).

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20 Rapid bus lines include Metro limited or express lines (lines 344 through 577 and 788), Metro Rapid Lines (lines 704-794, except line 788, and lines 901-910), and the Metro G (Orange) and J (Silver) lines.

21 Metro Local bus lines include Lines 1-96, 102-292, Metro Community Circulator Lines 603-687. Big Blue Bus and Culver Citybus are listed separately where applicable.

Bus stops are counted as each directional distinct bus stop. If multiple routes use the same bus stop it will only be counted once.

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### **Neighborhood Profiles**

As shown in the previous section, the study neighborhoods have varied existing transportation services. To build upon that, Table 10 summarizes various key infrastructure and geographic data that impact transportation needs and access.

The travel behavior zones for each neighborhood varies, with Sawtelle and Watts being composed largely of compact infill, Sun Valley having over 80% suburban center. The neighborhood averages for the travel behavior zones is roughly a third in suburban, suburban center, and compact infill. These varied travel behavior zones generally match expectations, for having selected Sawtelle and Watts to represent higher destination density areas and Sun Valley as an example of a lower destination density area.

Despite these development patterns, there are a number of built environment characteristics that defy expectations. Watts has a higher than average intersection density - very similar to intersection density in Sawtelle - but the density of traffic signals is lower than in Sun Valley, which has the lowest traffic signal density of all three neighborhoods. The ratio of traffic signal density to intersection density in Watts is 0.03, or about 1 signal per every 33 intersections. In Sawtelle, by contrast, roughly one in ten intersections is signalized. Lower signal density or signalization ratio may reflect lower volumes of motorists and less need for signalization, though without systematically available annual average daily traffic (AADT) metrics for all streets in the city, it is impossible to confirm this suggestion. It is also possible that the lower rate of signalization indicates streets that are optimized to move through-traffic (i.e., motorists) with few trafficcontrolled opportunities for people walking to cross the street.

Traffic signals are not the only way to achieve safer crossing opportunities for people walking or rolling, but they are an important tool for establishing right-of-way. The distribution of crosswalk markings also suggests a less welcoming pedestrian environment in Watts. While Watts has similar patterns of density and compact development as Sawtelle, the density of crosswalks per square mile in Watts is slightly over half of what we observed in Sawtelle. As a ratio of crosswalk markings per intersection,

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Watts has one crosswalk marking per 4.6 intersections, whereas Sawtelle has one per every 2.8 intersections. Many intersections have multiple markings (i.e., across two or more legs of the intersection) and some markings are mid-block, so it is likely that the prevalence of intersections without any marked crosswalks is even higher. Collectively, the patterns of signalization and crossing facilities suggest that Watts is underserved in terms of safety improvements for crossing the street.

Bus infrastructure density, a measure depicting the presence of amenities like bus benches or bus shelters, is also much lower in Watts than Sawtelle, and even lower than Sun Valley, despite Watts having more light rail service, local bus, and DASH bus service.

There is much more bicycle infrastructure in Sun Valley than in other neighborhoods, though this comes with a few caveats. Many of Sun Valley's on-street bike lanes are located along La Tuna Canyon Road, which is mainly used for accessing recreational hiking or mountain biking trails within La Tuna Canyon Park. Its usefulness for utilitarian purposes may be limited. An important note for all neighborhoods is that bicycle facility types alone may not capture how comfortable or useful the facility is, or if the facility type is appropriate for the local context. Additionally, it is important to note that women's biking travel needs and preferences have been shown to differ from men's. Some research has shown women to be more risk averse than men, which, if true, has implications for perceived comfort and safety in mixed traffic. Additionally, women encounter more street harassment and unwelcome interactions while bicycling,<sup>23</sup> and motorists encroach on female-assumed cyclists more than cyclists assumed to be male.<sup>24</sup>

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Collectively, the patterns of signalization and crossing facilities suggest that Watts is underserved in terms of safety improvements for crossing the street.

23 Kate Jelly, "Why Are Female Cyclists Targeted by Aggressive Drivers for Abuse?" (The Guardian, October 4, 2019), https://www.theguardian.com/environment/bike-blog/2019/oct/04/why-are-female-cyclists-targeted-by-aggressivedrivers-for-abuse)

Angie Schmitt and Tanya Snyder, "Drivers Are More Dangerous Near Women Cyclists," Streetsblog USA, August 5, 2019, https://usa.streetsblog.org/2019/08/01/study-drivers-behave-more-dangerously-around-women-cyclists/

### Table 10. Infrastructure and Geographic Variables

	SAWTELLE	SUN VALLEY	WATTS	LA NEIGHBORHOOD AVERAGE <sup>25</sup>
INTERSECTION DENSITY (/SQMI)	284.0	195.5	278.1	187.8
SIGNAL DENSITY (/SQMI)	27.5	9.0	8.5	11.0
SIGNAL TO INTERSECTION RATIO	0.10	0.05	0.03	0.06
STREETLIGHT DENSITY (/SQMI)	786.9	346.5	801.9	644.5
WALKABILITY INDEX <sup>26</sup>	0.86	-2.3	-0.3	-0.96
BUS BENCHES/SHELTERS TO STOP RATIO <sup>27</sup>	3.97	0.69	0.22	0.76
DENSITY OF BUS INFRASTRUCTURE	57.6	13.1	11.3	16.5

#### **BIKEWAYS BY TYPE**

CLASS 1 (SHARED USE PATH)	1.39	0	0	0.53
CLASS 2 (BICYCLE LANE)	1.48	14.47	2.12	3.40
CLASS 3 (BICYCLE ROUTE)	3.92	0	0	1.05
CLASS 4 (PROTECTED LANE)	0	0	0.29	0.12
PED/BIKE COUNT 2009-17	6.79	14.47	2.41	5.09

#### PERCENT OF AREA IN TRAVEL BEHAVIOR ZONE TIERS<sup>28</sup>

TIER 1 (SUBURBAN)	0%	15.84%	0%	33.98%
TIER 2 (SUBURBAN CENTER)	3.41%	81.40%	0%	33.18%
TIER 3 (COMPACT INFILL)	83.74%	2.76%	<b>82.61</b> %	26.33%
TIER 4 (URBAN)	12.68%	0%	11.46%	5.91%

- 25 Neighborhood average is calculated by summing the total for a variable and then dividing by the number of neighborhoods (110). It is inclusive of the study area neighborhoods.
- 26 The Walkability Index scores range from -4.2-10.3 within the City, and includes four components: land use mix, residential density, retail density, and intersection density. A negative score indicates lower than average walkability and a positive score indicates higher than average walkability.
- 27 Bus infrastructure include bus benches and bus shelters

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28 Watts has approximately 5.93% of the neighborhood area that does not have a defined TBZ, which accounts for the area not adding up to 100 percent. Appendix B

### **Traffic Safety**

The only dataset that can be simultaneously disaggregated by gender and study area is the one describing traffic injuries. This is an important dataset in many ways. To the extent that women's travel needs imply additional travel time in general or additional time spent as a vulnerable road user, their gender may be associated with an elevated risk of being injured or killed in a crash. Further, research suggests that female-bodied people are more likely to be killed or seriously injured than those matching the "average male" body type once a crash occurs, which is the body type auto manufacturers design safety features around.<sup>24</sup>

We analyzed the most recent three years of crash data — January 2016 through December 2018— during which, approximately 90,103 collisions occurred involving 163,085 victims, including 78,006 female victims. The crash data includes information on victims, including the degree of injury and gender, among other data. The traffic safety analysis used in this report assesses only crashes in which victims were killed or severely injured (KSI). Table 11 summarizes the KSI victims in the study area and the citywide neighborhood average. The table examines KSI victims by sex (female of all ages) and age (children under 18) as well as total victims overall. Note that "female" and "children" are not mutually exclusive; female children are counted in both categories.

Sawtelle, Sun Valley, and Watts are all above the citywide average for the number of KSI female victims and KSI children victims occurring in their respective neighborhoods. However, only Watts (43.2%) was substantially above the neighborhood average (29.4%) for percent of KSI victims being female. Watts' share of KSI victims who are children is more than double those of Sawtelle, Sun Valley, and the neighborhood average.

Among all crashes – including property damage-only crashes – women have larger representation (47.8% citywide). Their underrepresentation in KSI crashes may be due to behavioral differences or travel patterns (e.g., potentially lower VMT or

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To the extent that women's travel needs imply additional travel time in general or additional time spent as a vulnerable road user, their gender may be associated with an elevated risk of being injured or killed in a crash. different spatial distribution concentrated on lower speed roadways). Notably, while women are less likely to be involved in a fatal or serious injury crash, national research shows that if they are in a KSI crash, they are more likely to be killed or seriously injured due to automobile safety features being designed around male-bodied crash dummies.<sup>29</sup>

People of color and people with low incomes tend to bear a disproportionate burden of traffic violence, for a number of structural reasons: disparities in the built environment and infrastructure investment, inadequate access to health care and bias in the medical system, bias in policing and enforcement, and vehicle age, among others. It is therefore noteworthy that Watts, our "low income, high destination density" neighborhood, has the highest percent of KSI victims that are female and/or children among our study neighborhoods and the citywide average. The percent of KSI child victims is particularly troubling, as it is more than double the observed rate for other neighborhoods.

Figure 2 through Figure 4 show the geographic distribution of victims by gender or age for KSI collisions, overlaid with the Vision Zero Priority Corridors. Overlaying these two datasets can bring to light if these corridors present higher concentrations of female and child victims getting killed or severely injured.

When comparing where female and male KSI collisions occur, we see some spatial differences. While we see some similarities in where hotspots occur, such as a major hot spot in Florence, the Vision Zero Priority Corridors appear to slightly align more with male KSI victim locations. Given the higher number of male KSI victims this is not surprising. Additionally, when looking at KSI victims under 18, Watts has a higher than citywide average percentage. This echoes the anecdotes that stakeholders have shared in the neighborhood about children being killed or severely injured near or around schools. Figure 4 shows a heatmap of where KSI collisions with children occur, overlaid with school points.

Figure 5 and Table 11 show the spatial distribution of safety efforts, including Vision Zero Priority Corridors, the High Injury Network, and both planned and installed Vision Zero improvements. Visualizing the planned safety measures indicates

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**People of color** and people with low incomes tend to bear a disproportionate burden of traffic violence, for a number of structural reasons... It is therefore noteworthy that Watts... has the highest percent of **KSI** victims that are female and/or children...

<sup>29</sup> Keith Barry, "The Crash Test Bias: How Male-Focused Testing Puts Female Drivers at Risk," Consumer Reports, October 23, 2019, https://www.consumerreports.org/car-safety/crash-test-bias-how-male-focused-testing-puts-female-driversat-risk/)
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how their spatial distribution impacts gender differences. Only Sawtelle includes a Vision Zero Priority Corridor. Given that there are only 23 corridors across the city, the neighborhood average is not particularly useful in comparison. Sawtelle, Sun Valley and Watts have below average Vision Zero improvements and below the citywide average for frequency of High Injury Network segments

There are 28 neighborhoods throughout the city that have at least one Vision Zero Priority Corridor. On average, these neighborhoods have 8 High Injury Network segments identified within their boundaries. While there are many other factors that contribute to identifying Vision Zero Priority Corridors, there were 15 neighborhoods that had more than 8 High Injury Network segments and no Priority Corridors, including Sun Valley.

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### Table 11. Killed or Severely Injured Collisions and Safety Efforts<sup>30</sup>

	SAWTELLE	SUN VALLEY	WATTS	LA NEIGHBORHOOD AVERAGE <sup>31</sup>
KSI FEMALE VICTIMS	18	31	19	12.7
TOTAL KSI	60	112	44	43.2
% KSI FEMALE VICTIMS	30.0%	27.7%	43.2%	29.4%
KSI CHILDREN <sup>32</sup>	3	7	6	2.9
% KSI CHILDREN VICTIMS	5.0%	6.3%	13.6%	6.7%
VISION ZERO PRIORITY CORRIDORS	1	0	0	0.4
VISION ZERO IMPROVEMENTS <sup>33</sup>	3	2	3	25.9
HIGH INJURY NETWORK CORRIDORS	10	12	6	5.7

30 All KSI data is using a 3 year average of data collected from January 2016 through December 2018.

31 Neighborhood average is calculated by summing the total for a variable and then dividing by the number of neighborhoods (110). It is inclusive of the study area neighborhoods.

32 Children defined as someone who is under the age of 18.

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33 The overall citywide average is high due to a number of neighobrhoods having over 100 planned and implemented Vision Zero improvements. The median value across all neighborhoods is 7.5.

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### Figure 3. Traffic Collisions - Male Victims



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# CONCLUSIONS + NEXT STEPS

The existing conditions analysis outlines the study areas' existing transportation services, safety analysis, neighborhood infrastructure profiles, and neighborhood demographics. Together, this analysis gives a holistic picture of what is shaping the way women, girls, and gender minorities travel in these neighborhoods. This comparison can illustrate how the existing transportation system is providing for populations in the study area.

The study neighborhoods vary widely by demographics, transport services and infrastructure, land use/built environment profiles, and safety conditions. The lack of infrastructure and pervasive traffic safety issues in Watts are dramatic and sadly interact with the lowest income neighborhood examined here.

The findings from this analysis will support data collection and interpretation in Task 4, to help understand the travel needs and experiences of women, girls, and gender minorities. Already, preliminary qualitative data collection is adding depth to this existing conditions analysis. Community members in Watts commented on traffic deaths among children near schools, which echoes the pattern in the quantitative safety data showing that the proportion of KSI child victims in Watts is double what we observed in other neighborhoods and the citywide average. Watts has a similar street light density to Sawtelle, but community members have reported that the lights may be underpowered or dimmed and do not provide adequate lighting. As engagement with community members in Sawtelle and Sun Valley continues, we will learn more about the nuances of travel and existing conditions in those neighborhoods as well.

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### Figure 6. Transit Services: Citywide



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### Figure 7. Transit Services: Sawtelle



### Figure 8. Transit Services: Sun Valley



### Figure 9. Transit Services: Watts



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### Figure 10. Bus Stop Amenities: Sawtelle



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### Figure 11. Bus Stop Amenities: Sun Valley



### Figure 12. Bus Stop Amenities: Watts



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### Figure 13. Bike Facilities: Citywide



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### Figure 14. Bike Facilities: Sawtelle



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### Figure 15. Bike Facilities: Sun Valley



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#### Figure 16. Bike Facilities: Watts



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### Figure 17. Safe Routes to School: Sawtelle



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### Figure 18. Safe Routes to School: Sun Valley



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#### Figure 19. Safe Routes to School: Watts



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#### Figure 20. Bike + Pedestrian Count Locations: Sawtelle



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# Figure 21. Bike + Pedestrian Count Locations: Sun Valley



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### Figure 22. Bike + Pedestrian Count Locations: Watts



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#### Figure 23. Pavement Conditions Index (PCI): Sawtelle



# Figure 24. Pavement Conditions Index (PCI): Sun Valley



# Figure 25. Pavement Conditions Index (PCI): Watts



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### Figure 26. Pedestrian Safety Improvements: Sawtelle



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# Figure 27. Pedestrian Safety Improvements: Sun Valley



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# Figure 28. Pedestrian Safety Improvements: Watts



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