#### Abi Oluyomi, PhD.

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# Parental safety concerns and active school commute:

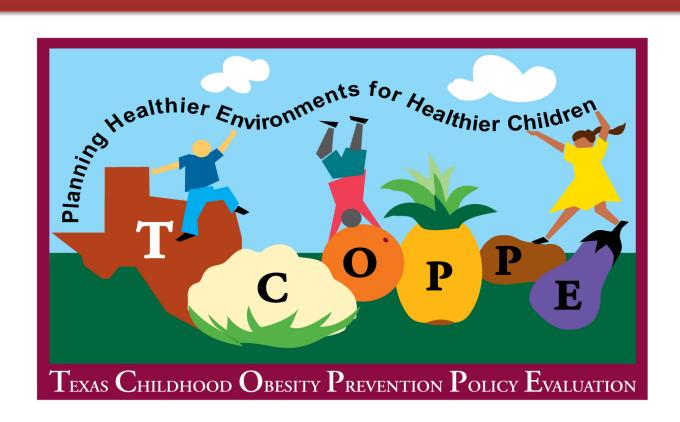
correlates across multiple domains in the home-to-school journey.







#### PARENT STUDY



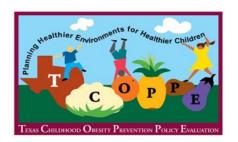
# **T-COPPE**







#### PARENT STUDY



#### **T-COPPE:**

#### **Purpose**

Conduct a statewide evaluation of Safe Route To School (SRTS)

#### Design

Quasi-experimental design comparing 3 groups – Infrastructure, Non-Infrastructure, Control

#### **Measures**

- Student
- Parent
- School/Community





# CURRENT STUDY GOAL/OBJECTIVES







... relationships between WTS and measures of <u>traffic</u> and <u>personal</u> safety

... in elementary schoolchildren from different parts of Texas (US).







Evidence of relationship btw. safety and walking to school (WTS) growing

... limited understanding of the multiple domains of parental safety concerns and specific mechanisms through which parents articulate safety concerns. ... relationships between WTS and measures of <u>traffic</u> and <u>personal</u> safety

... in elementary schoolchildren from different parts of Texas (US).







# traffic safety

perceived traffic safety concerns

# personal safety

perceived personal safety concerns

... relationships between WTS and measures of <u>traffic</u> and <u>personal</u> safety

... in elementary schoolchildren from different parts of Texas (US).







# multiple environments

- **❖** Home
- En-route to school
- School

... relationships between WTS and measures of <u>traffic</u> and <u>personal</u> safety

... in elementary schoolchildren from different parts of Texas (US).





# STUDY SETTING



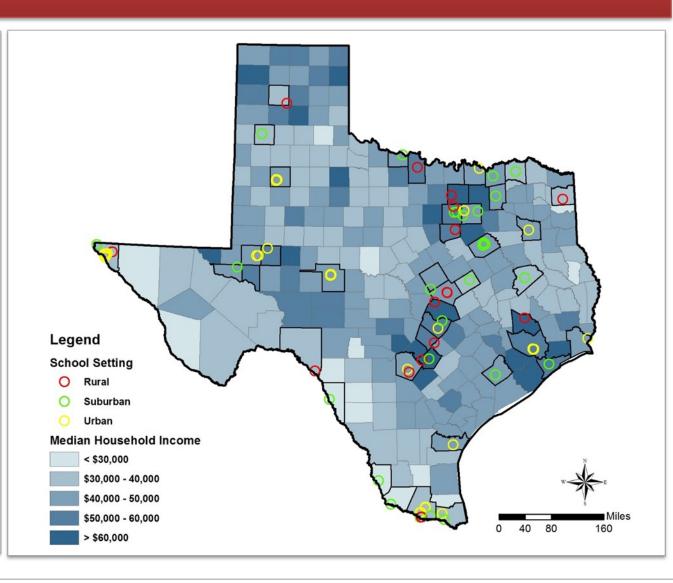




#### STUDY SETTING: SITES

- \* 81 schools participated
- from 58 cities
- in 43 counties

(Texas DOT approved SRTS projects)



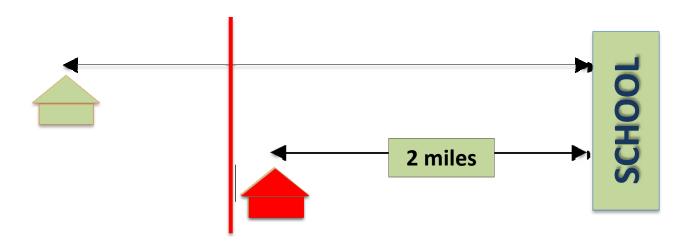






#### STUDY SETTING: POPULATION

- ❖ All 4th grade students and their parents (n=6,500 pairs) in study schls.
- ❖ 2,053 (31.6%) parent surveys and 3,315 (51%) student surveys returned,
- ❖ of which there were 1,635 parent-student dyads.
- \* 80% (n=1,305) of the dyads' home addresses successfully geocoded (GIS)





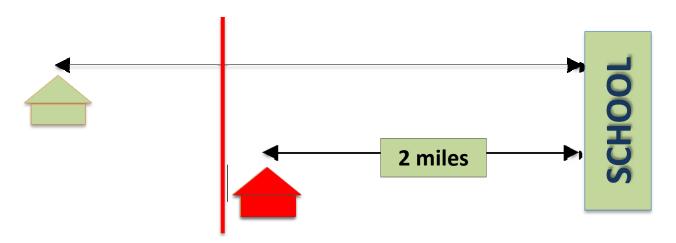




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**857** in 2-mile distance (-) **27** no outcome data (=) **830** dyads for analysis.









# **M**EASURES







## OUTCOME – WALKING TO SCHOOL (WTS)

## **Parent reported**

question from the National Safe Route To School Survey.

Question – "On most days how does your 4th grade child arrive at school and leave after school?"





#### Perceived Traffic Safety Concerns

#### Home neighborhood environment

- (1) Availability and quality of sidewalks
- (2) Safe road crossings
- (3) Observance of other people walking or bicycling

#### **En-route environment**

- (4) Availability of sidewalks/pathways
- (5) Safety at intersections/crossings
- (6) Crossing guards; and the amount/speed of traffic

#### **School environment**

- (7) Availability and quality of sidewalks
- (8) Availability and quality of bike lanes/paths and bike racks
- (9) Trees along the streets; and safe road crossings.







#### Perceived Personal Safety Concerns

#### Home neighborhood environment

- (10) Safety of their child to walk or bike
- (11) Personal sense of fear when walking outside alone after dark

#### **En-route environment**

- (12) Availability of adults or other children to walk with
- (13) Violence or crime (e.g. Bullying/gangs)
- (14) And stray or dangerous animals

#### **School environment**

- (15) Attractive buildings or natural things to see
- (16) Abandoned houses or vacant lots
- (17) Condoms and drug-related paraphernalia
- (18) Well-maintained homes/apartments and gardens
- (19) Other people who walk/bike







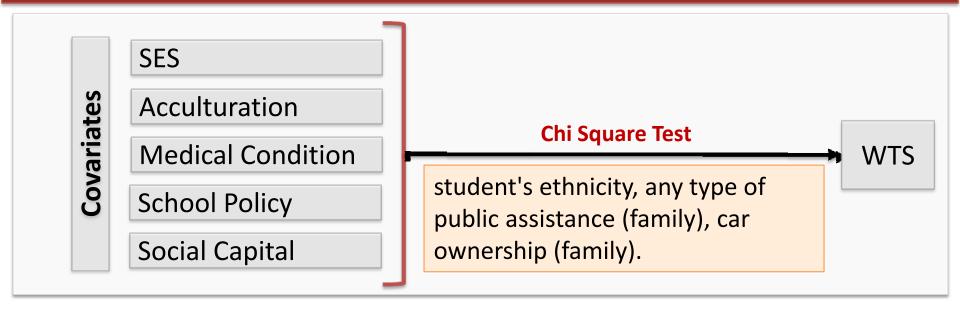
# **A**NALYSIS

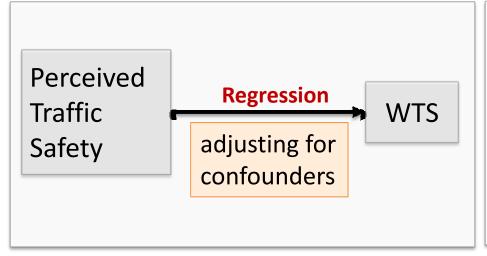


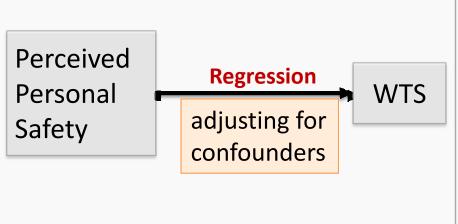




#### **A**NALYSIS













# **RESULTS**







#### RESULTS: STUDY PROFILE

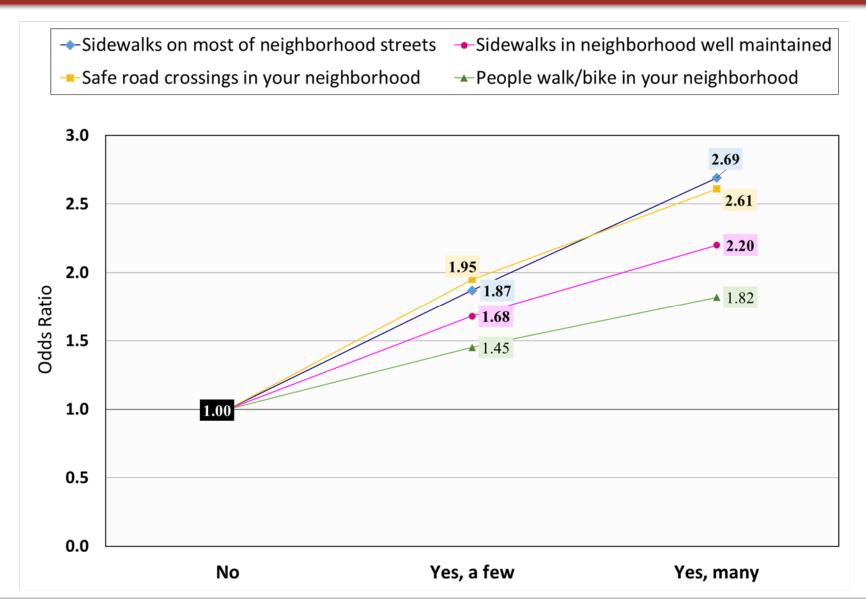


- ❖ 18.7% of parents reported WTS for child, 1.8% biked.
- Girls & boys equally represented, majority Hispanics.
- ❖ 1/3 of families received public assistance, most parents high school/GED, almost every family had a vehicle.
- Majority of parents born in US, thought/spoke in English, small proportion of students born outside US.





#### RESULTS: Perceived **Traffic** Safety Concerns - **Home**

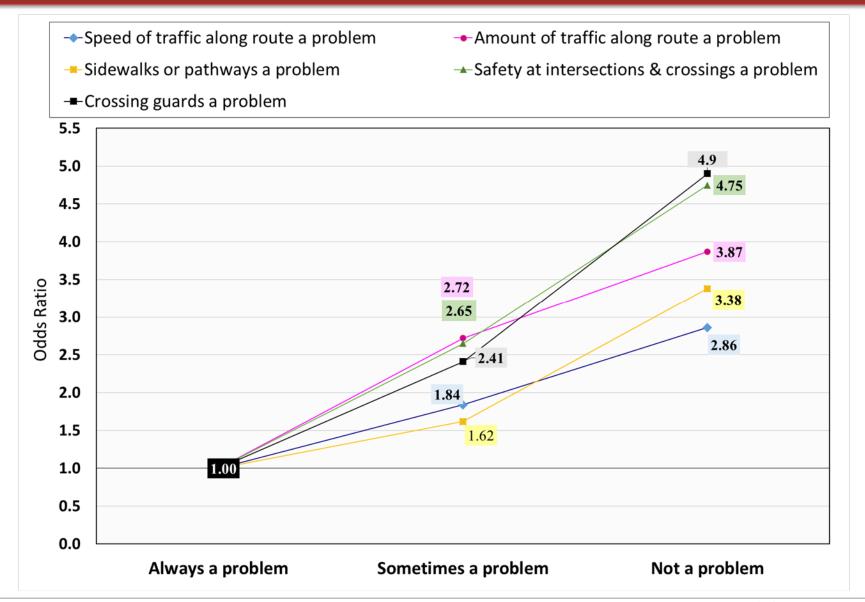








#### RESULTS: Perceived **Traffic** Safety Concerns – **En-route**

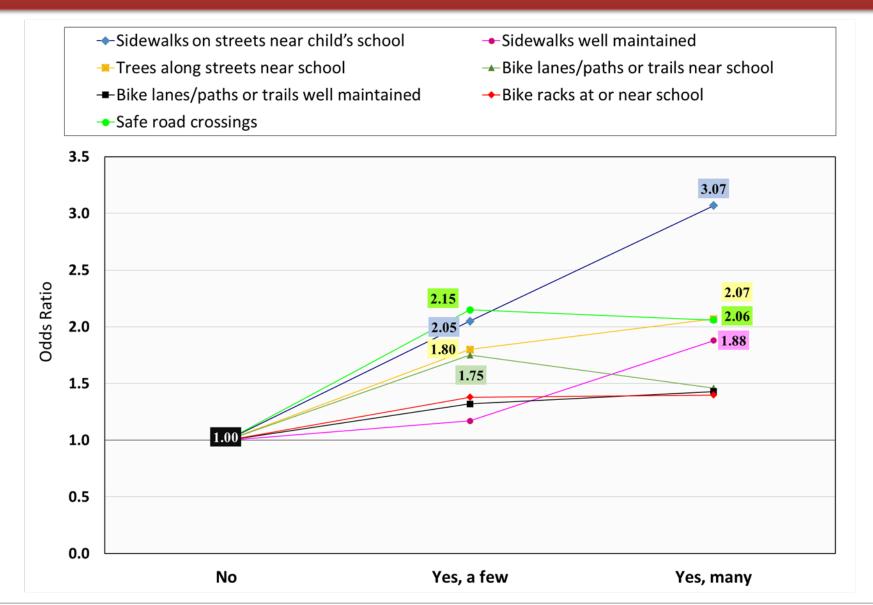








#### RESULTS: Perceived **Traffic** Safety Concerns - **Schools**

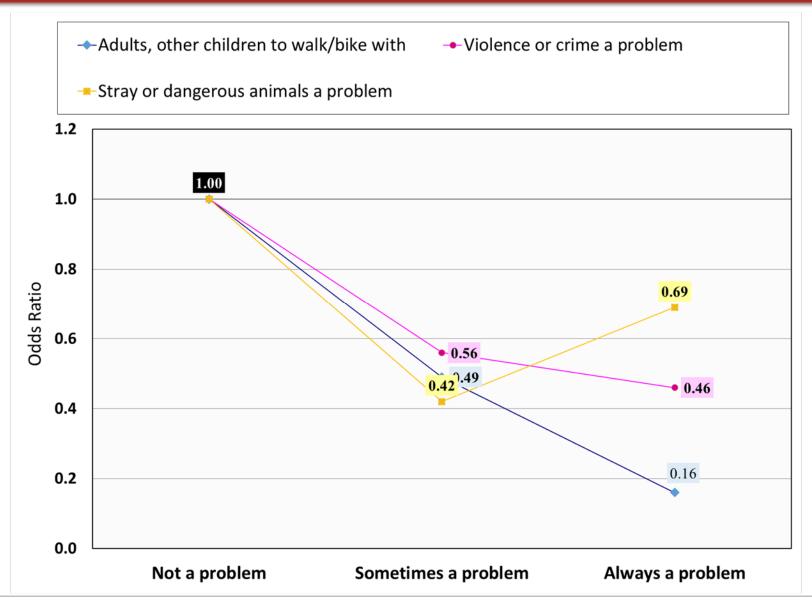








#### RESULTS: Perceived **Personal** Safety Concerns – **En-route**

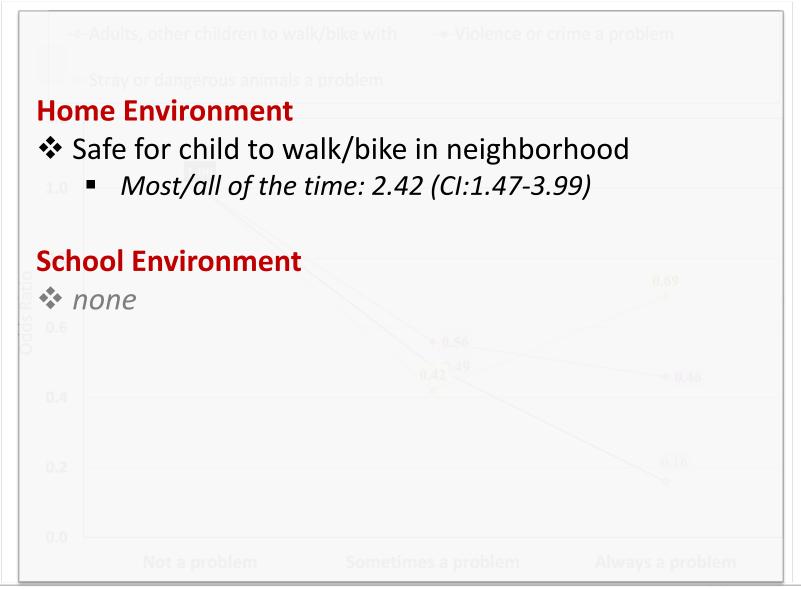








# RESULTS: OTHER PERCEIVED **PERSONAL** SAFETY CONCERNS

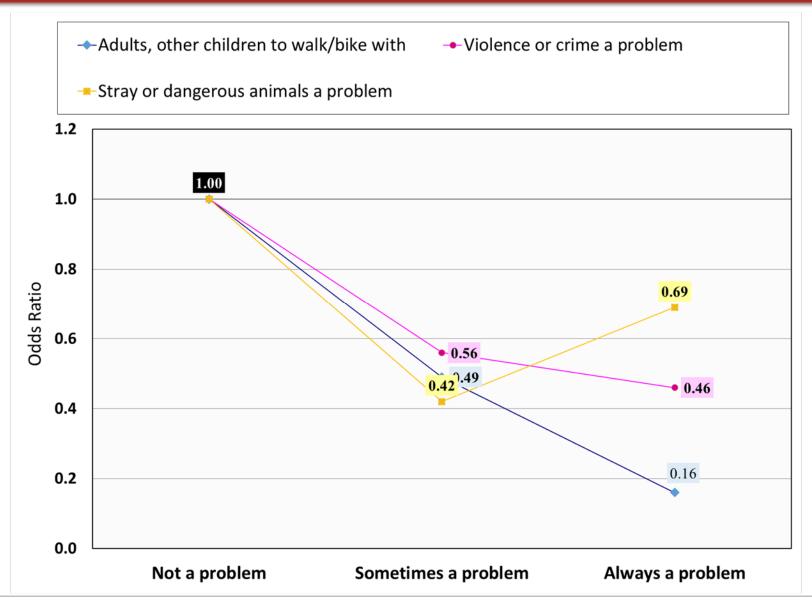








#### RESULTS: Perceived **Personal** Safety Concerns – **En-route**









# **C**ONCLUSIONS







#### CONCLUSIONS — TRAFFIC SAFETY

## **Traffic safety**

In general, WTS depended on...

parental perceptions of the following...

#### Neighborhood:

sidewalks and safe road crossings

#### **En-route:**

<u>sidewalks</u>, speed & amount of <u>traffic</u>, and <u>intersections</u>

#### **School:**

<u>sidewalks</u>, <u>crossing</u> guards, and availability of <u>trees</u> along streets







#### CONCLUSIONS — TRAFFIC SAFETY

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#### CONCLUSIONS — PERSONAL SAFETY

#### **Personal safety**

In general, WTS depended on...

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#### **Neighborhood:**

**general** neighborhood safety

#### **En-route:**

stray or dangerous <u>animals</u>, and availability of <u>adults</u> with whom child can walk





#### CONCLUSIONS — PERSONAL SAFETY

#### **Personal safety**

In general, WTS depended on...

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#### **Neighborhood:**

**general** neighborhood safety

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#### TAKE-HOME

- Specific safety concerns in the home-to-school journey explained some of the variance in WTS.
- Of particular importance to parents is traffic safety along the route to the school.
- Increased focus on, and investment in, pedestrian-centric transportation infrastructures may result in increased WTS.







# **OTHER ITEMS**







#### TAKE-HOME

Oluyomi et al. International Journal of Behavioral Nutrition and Physical Activity 2014, 11:32 http://www.ijbnpa.org/content/11/1/32



RESEARCH Open Access

# Parental safety concerns and active school commute: correlates across multiple domains in the home-to-school journey

Abiodun O Oluyomi<sup>1\*</sup>, Chanam Lee<sup>2</sup>, Eileen Nehme<sup>1</sup>, Diane Dowdy<sup>3</sup>, Marcia G Ory<sup>3</sup> and Deanna M Hoelscher<sup>1</sup>

**Abstract** 







#### RECOGNITIONS



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CENTER for HEALTHY LIVING







#### THANK YOU



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