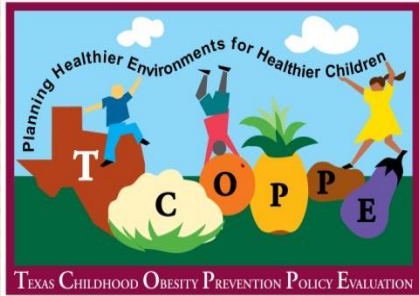
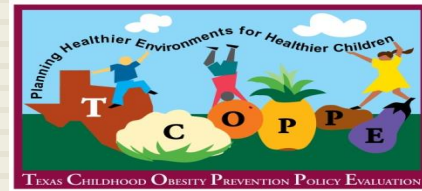


# EFFECTS OF FUNDING ALLOCATION FOR SAFE ROUTES TO SCHOOL PROGRAMS ON ACTIVE COMMUTING TO SCHOOL, SELF-REPORTED PHYSICAL ACTIVITY, AND ENVIRONMENTAL FACTORS



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# Methods



## Timeline:

Baseline data in 2009

Interim data in 2010 &  
2011

Follow up data in 2012

## ACS Counts:

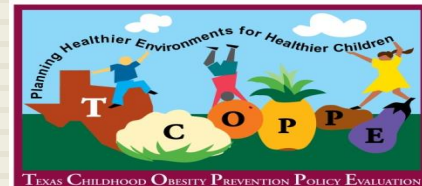
-4<sup>th</sup> grade children

-2 days of data collection

-Validity

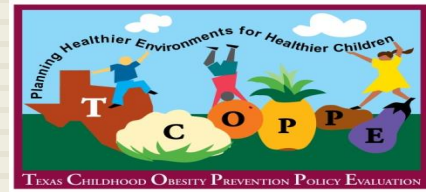
- At baseline and follow up:
  - Serial cross-sectional survey data were collected from parents and 4<sup>th</sup> grade children using validated questionnaire items
  - Built environment characteristics were measured using GIS and an audit instrument (Lee et al., 2013)
  - School-level questionnaire used for determination of implementation of SRTS policies
- Morning & afternoon ACS counts obtained by child self-report at 4 time points

# Measurement Periods and Sample Size



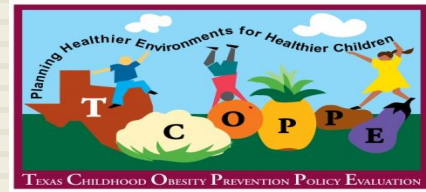
	<b>Baseline (T1)</b>	<b>Interim (T2)</b>	<b>Interim (T3)</b>	<b>Follow Up (T4)</b>
Time Range	Mar-Dec, 2009	May-June, 2010	May-June, 2011	April-May, 2012
<i>TOTAL Schools</i>	78	52	61	73
Comparison	34	24	23	30
Infrastructure	23	14	19	23
Non-infrastructure	21	14	19	20
ACS to School	12154	9755	10709	11635
ACS from School	12134	9707	10649	11579

# Summary of Student Self-Reported Data in 2009 and 2012 (n = 3315 and 3977)



- When examining significant differences by type of school over time (time effects), there were:
  - increases in parent support for PA in infrastructure and comparison schools,
  - Increase in friends ACS in comparison schools,
  - Increases in self-efficacy in comparison schools and decrease in SE in NI schools, and
  - Increased in self-reported days of exercising at least 30 minutes in infrastructure and comparison schools.
  
- When examining significant differences between types of school at follow up:
  - Non-infrastructure and comparison schools in self-efficacy (NI>Comparison)
  - Infrastructure and comparison schools in SE (I>C)
  - Days of PA between NI and comparison (NI >C)

# Summary of Parent Self-Reported Data in 2009 and 2012 (n = 2053 and 2080)



- Significant changes over time in:
  - Neighborhood walkability – follow up worse than baseline
  - Rules for child walking – increased over time
  - School walkability – decreased over time
  - PA knowledge – increased over time
  
- Significant differences between groups:
  - NI > C for Self-efficacy
  - Parent outcome expectation NI > C

# Limitations and Strengths

- ❑ Self-report survey data
- ❑ Study timeline not always consistent with project implementation
- ❑ Implementation data are difficult to collect
  
- ❑ Large and diverse sample size
- ❑ Quasi-experimental design
- ❑ Longitudinal data at school level

# Conclusions

- Implementation of policies that fund SRTS infrastructure and non-infrastructure projects have minimal significant effects on ACS in the short term, e.g., 3 years.
  - ▣ More differences seen with NI schools compared to I schools
- Non-infrastructure funding appears to have slightly negative effects on ACS over time.
- Comparison schools implemented more SRTS activities over time – secular trends?
- More long term follow up may be necessary to determine outcomes of infrastructure projects.

# Implications for Practice and Policy

- Policies that provide cost-reimbursement funding for SRTS infrastructure initiatives appear to be difficult to implement at a high level.
  - ▣ May not achieve desired outcomes in the short term
- Non-infrastructure activities need mechanisms for continued support or maintenance over time.
- Policies that address SRTS need to focus on adequate implementation to achieve desired effects.