



HIGH-SHIFT SCENARIO

UC-DAVIS & ITDP

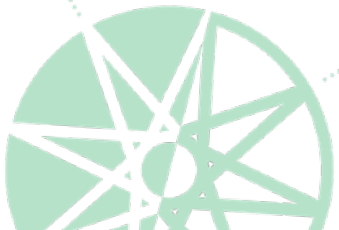
CLAYTON LANE
CEO

INSTITUTE FOR TRANSPORTATION &
DEVELOPMENT POLICY

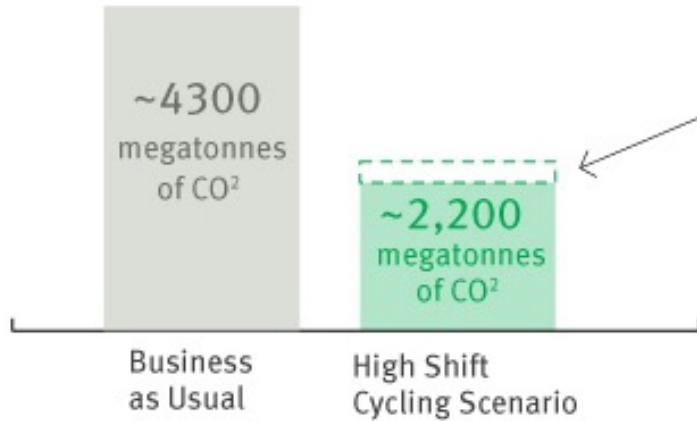
@ClaytonHLane

High Shift Scenario

- **“Base Case” aligns with the IEA 4 degree scenario (4DS)**
 - Some fuel economy improvement
 - No shift away from car growth
 - Other modes static or slow growth
- **“High Shift” Scenario:**
 - Increased rapid transit
 - More walking and cycling, & E-bike use
 - Preserve projected growth in personal mobility
 - Cut car travel in cities by half by 2050 from Base Case

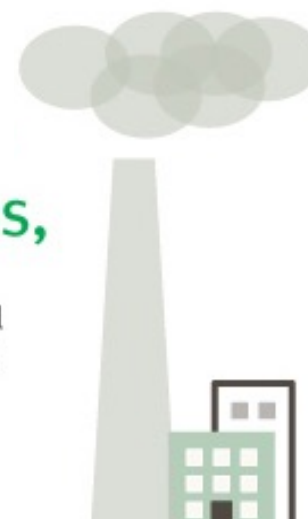


2050 EMISSIONS
FROM URBAN TRANSPORT

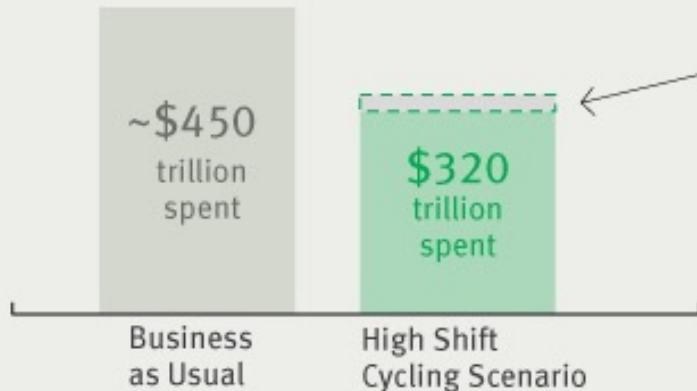


We could avoid
~2100 megatons
of global CO2 emissions,

a 7% reduction in urban transport emissions over BAU due to cycling, as part of a 47% total reduction in the comprehensive HSC scenario



2015-2050 CUMULATIVE
COSTS OF TRANSPORT



And save cities

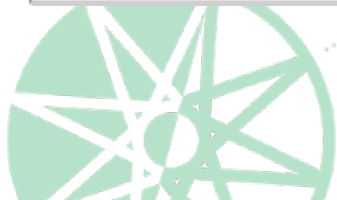
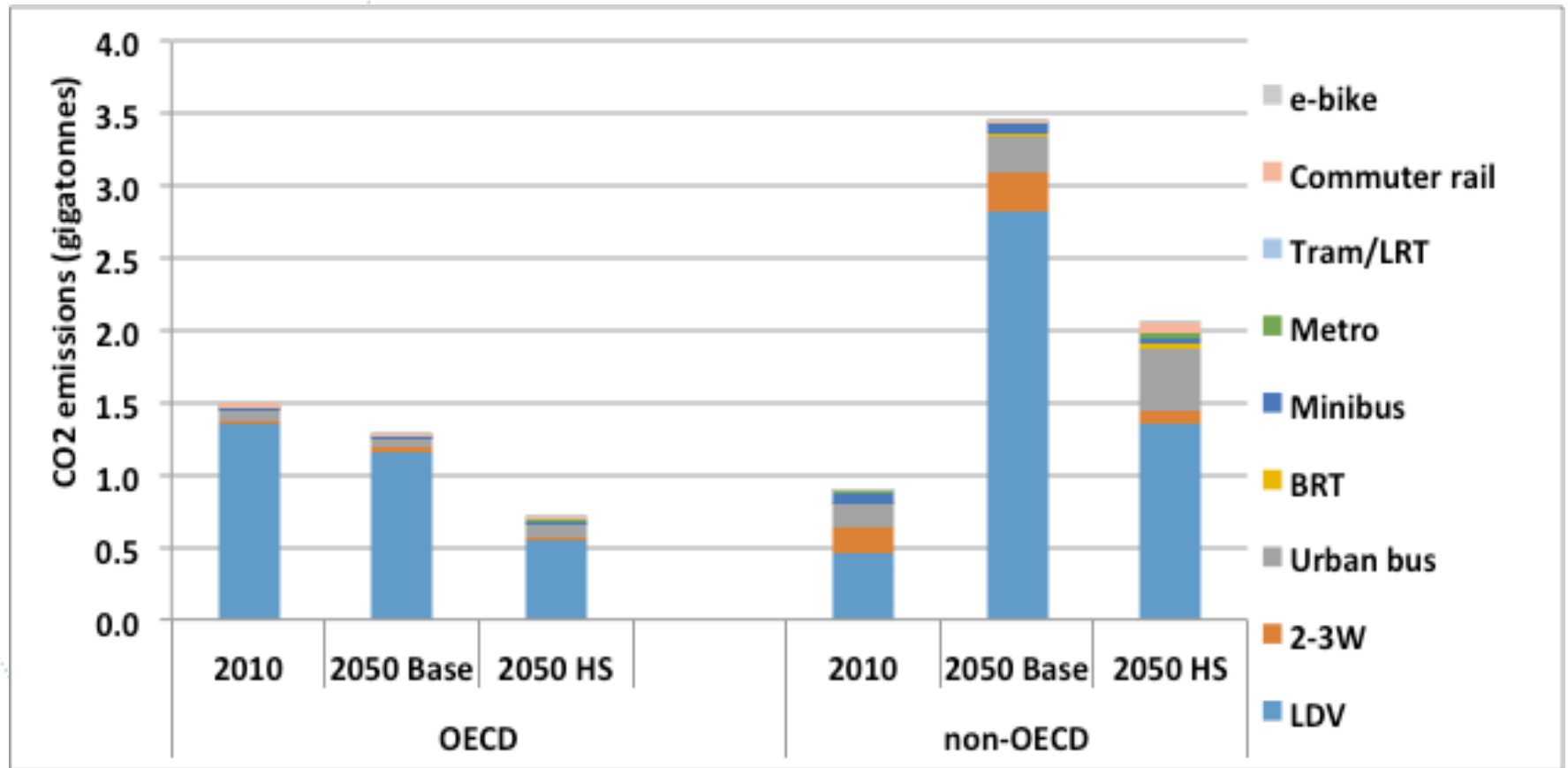
\$130 trillion

over the next 35 years
with \$25 trillion due to cycling



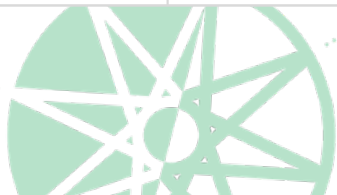
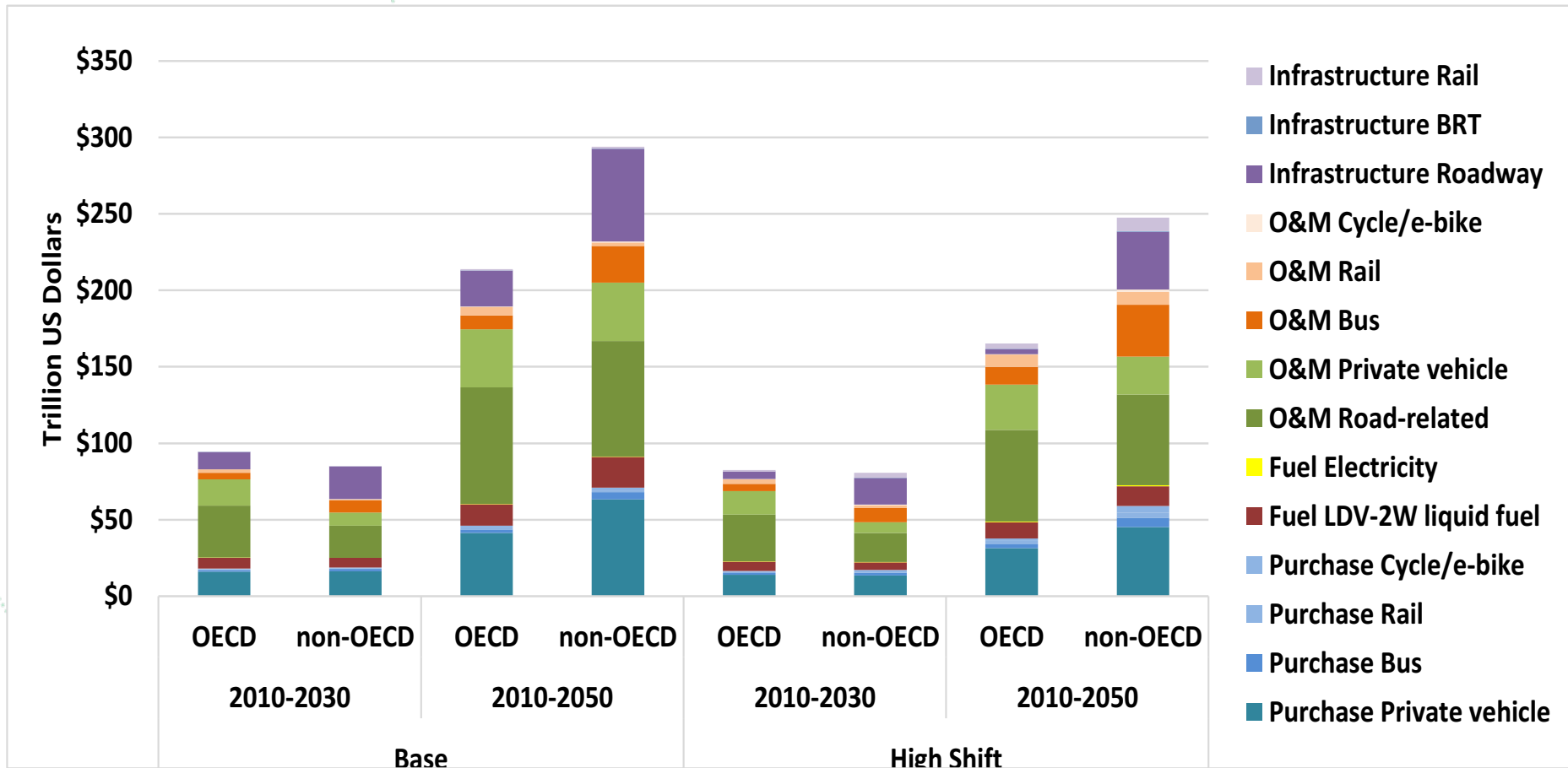
Cut annual CO2 emissions 2.1 GT (47%)

Impact on global urban passenger transport CO2 emissions



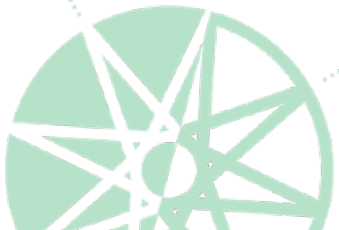
Global Savings of \$130 trillion by 2050

Global Public and Private Direct Costs



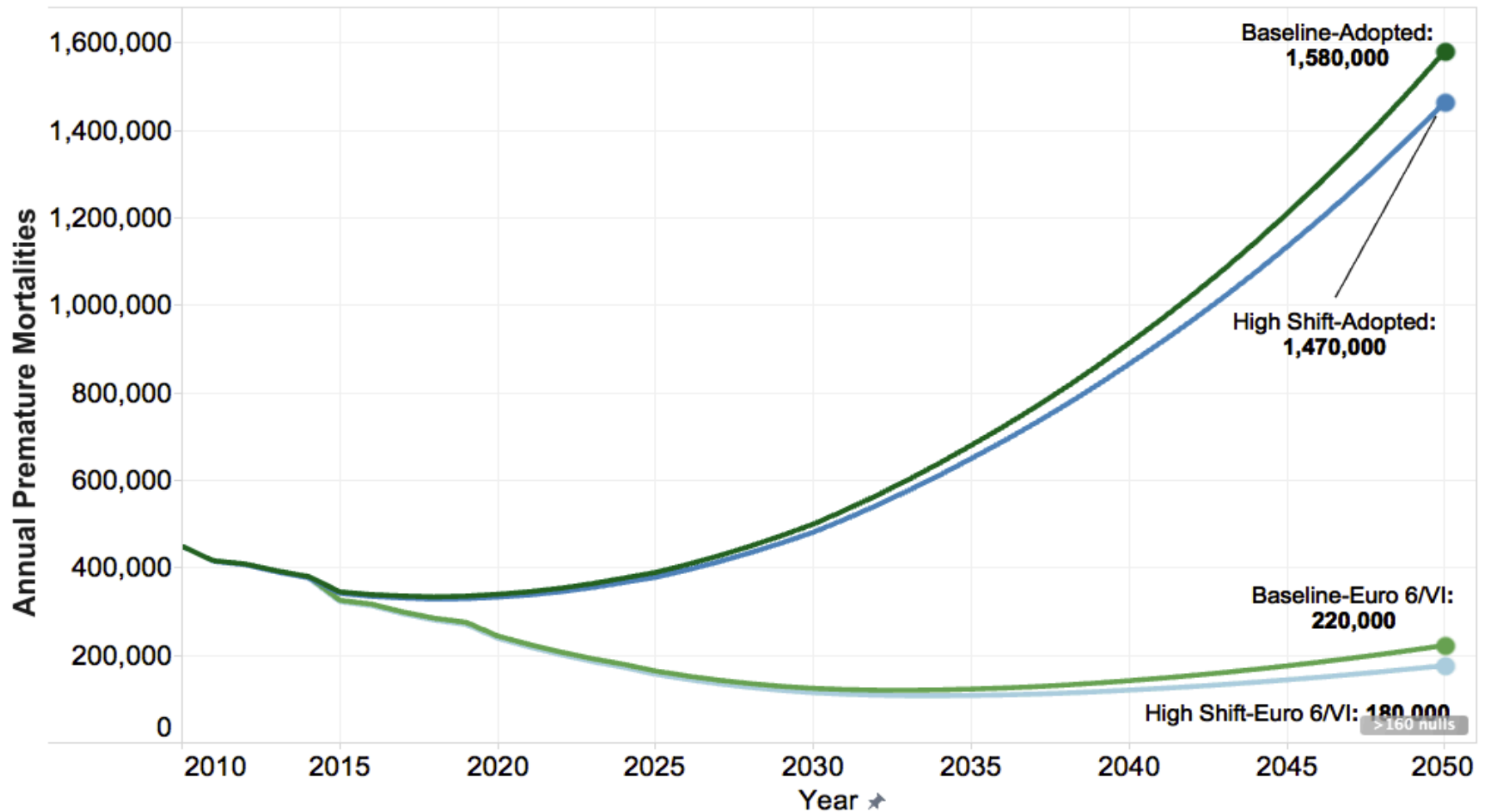
How to Finance?

Re-route 20% of what would have been spent on cars/roads to public transport, walking, and cycling – this will provide most of what is needed.



Need Emission Standards to Cut P

Global Air Pollution Mortality from Urban On-Road PM2.5



Data labels indicate global annual premature mortalities from exposure to primary PM2.5 emissions from on-road vehicles in urban areas.

Need All Solutions

