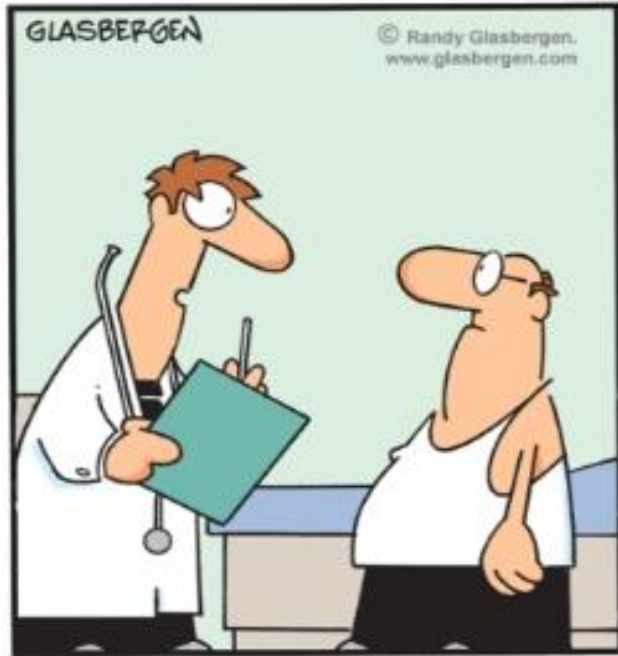


Texas A&M –
School of Public Health-
McAllen Campus

Efforts at Population-wide Prevention of Diabetes

Ann V. Millard Ph.D.

Preventing Obesity will Prevent Diabetes



Good nutrition + Sufficient exercise
---Prevent & Reverse Type 2 Diabetes
(in 70% - 80% of cases)

“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”

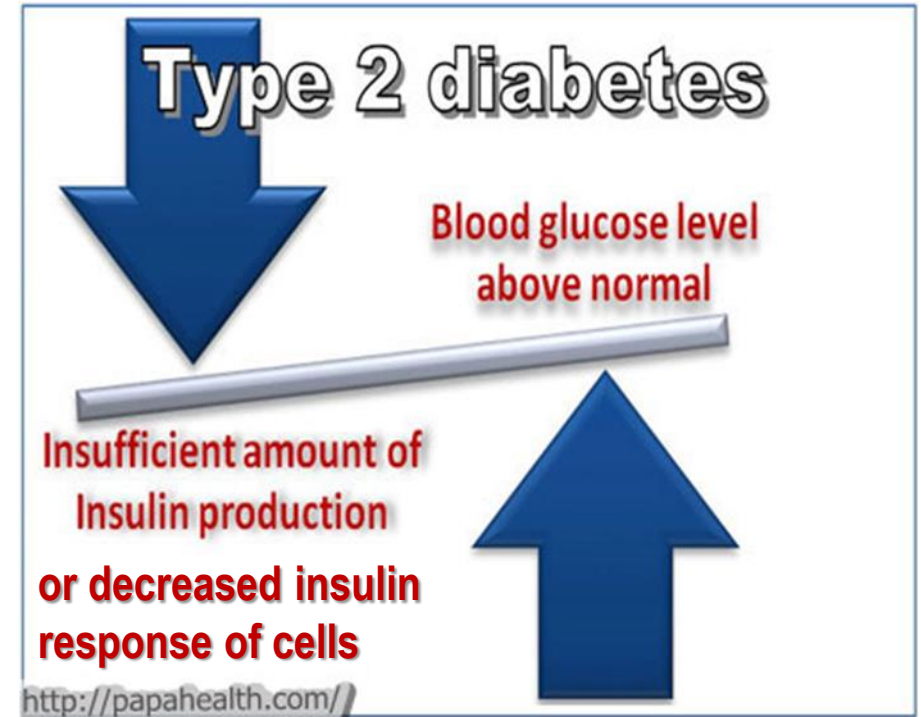
Type 2 Diabetes (aka Diabetes Mellitus or Adult-onset Diabetes)

Diabetes cases^a:

5-10%, Type 1 (genetically determined)
90-95%, Type 2 (genetics, obesity, poor nutrition, low exercise level)

Type 2: main cause of blindness,
non-traumatic leg amputations,
kidney dialysis

Kidney dialysis 3 times/wk., \$89,000 to \$190,000/yr.




Collective Impact

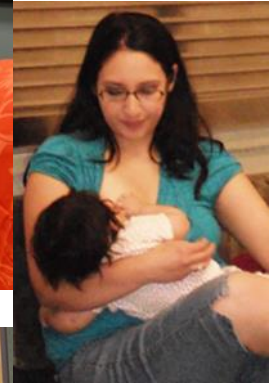
**“Large-scale social change
requires
broad cross-sector coordination,
yet the social sector remains focused on
the isolated intervention of
individual organizations.”**

John Kania & Mark Kramer (2011) Stanford Social Innovation Review 65.



Collective efforts across the lifespan in the valley

WIC Program: **Lactation Center** open
to all women
to  breastfeeding



Project with Edinburg schools (Dept. of State Health Services funds)

SKiP (School Kids & Play)

Created a School Park at Elementary Schools

- Public access to school playground after hours and on weekends
- Walking trail, playground equipment
- Increased physical activity during the school day



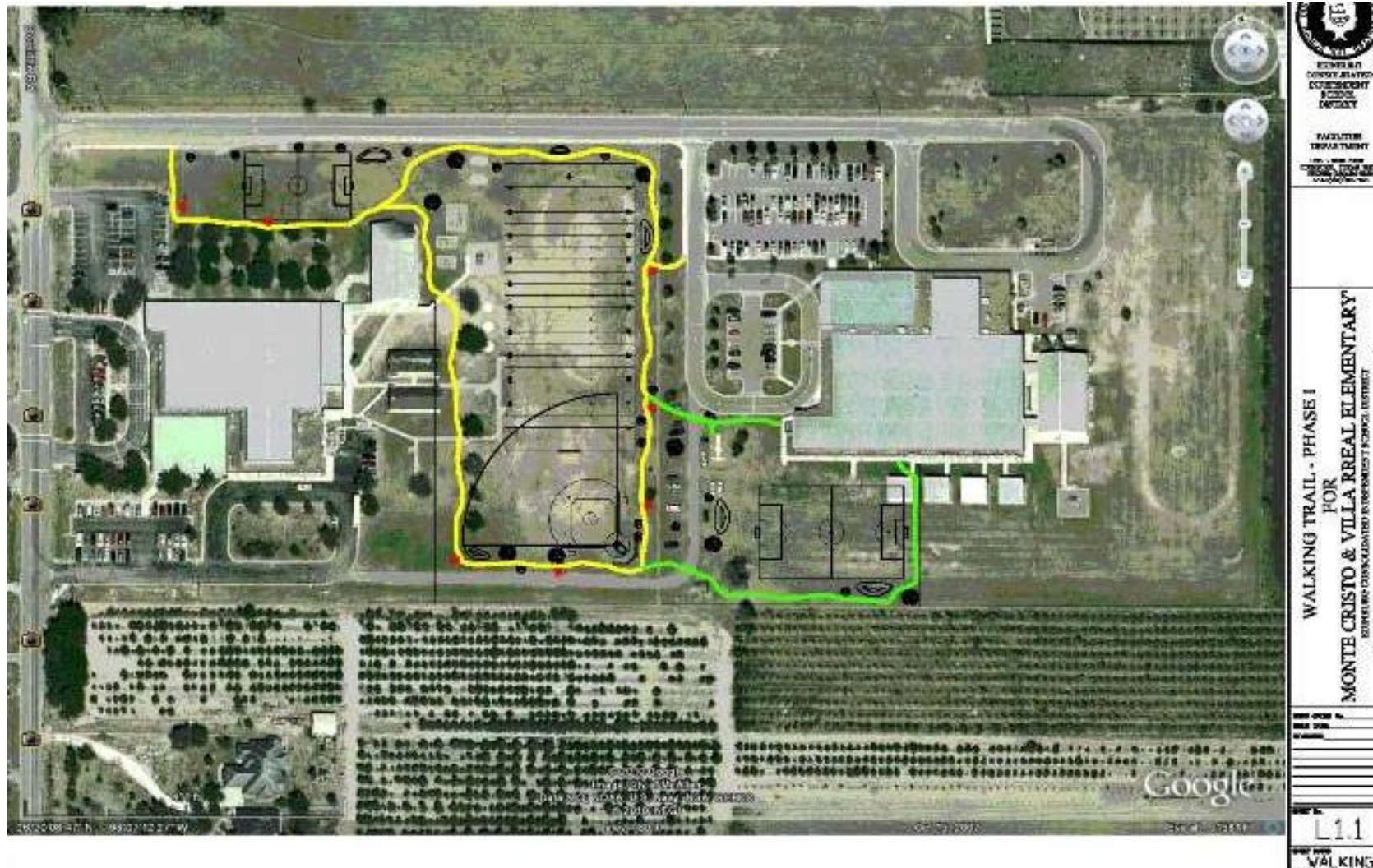
SKiP

Message to students & parents: increase physical activity to improve health & academic achievement; no message about obesity



Walking Trail Plan: Phases 1 & 2

Installed at existing playground



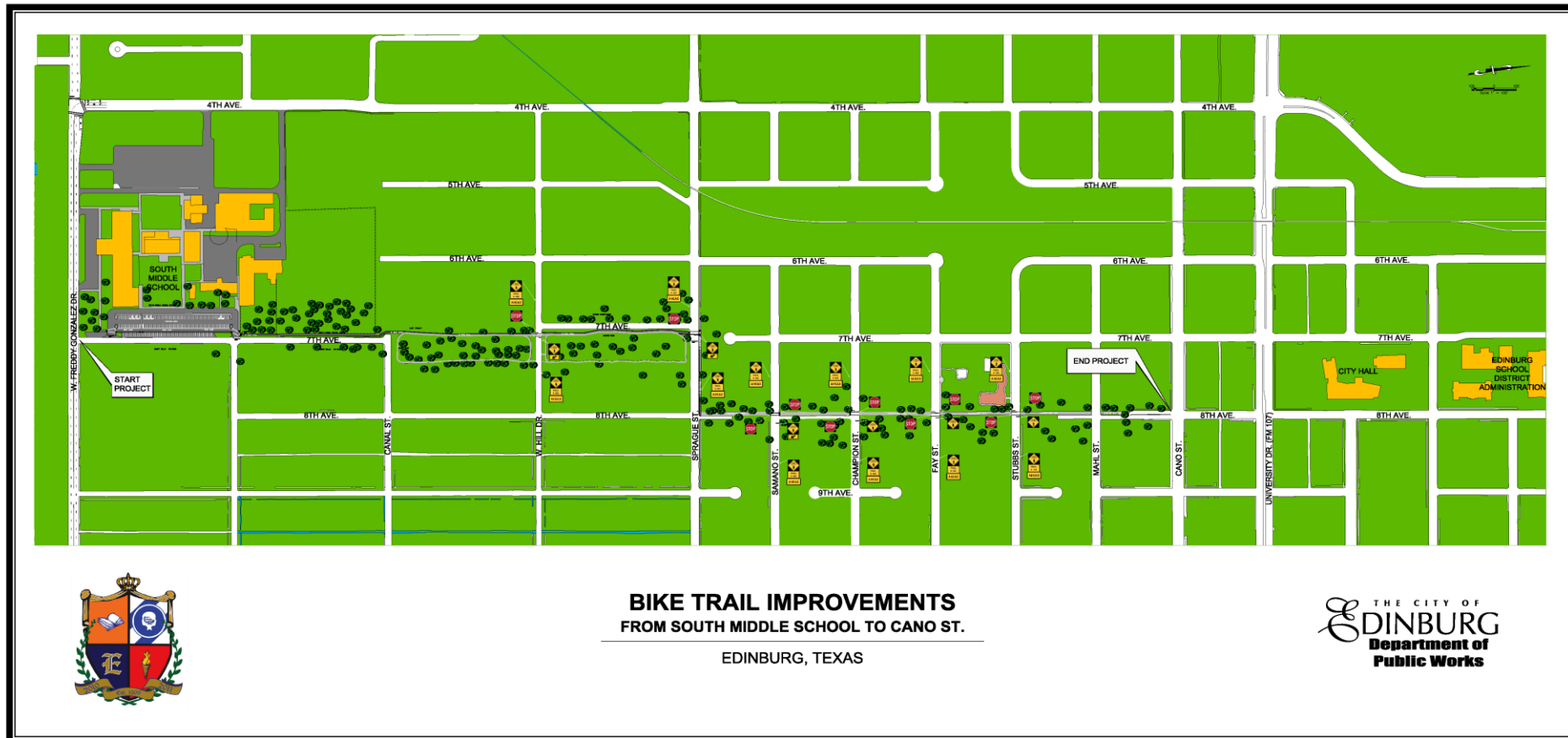


Ribbon Cutting Ceremonies and the Walking Trail at the two Elementary Schools

Award for Excellence in Texas School Health to Albert Lopez, Coordinator of School Health Services, ECISD, 2012



Bike Path Development from South Middle School (South, at left) to Cano St. (North, at right)



Gil Penalosa presentations, meetings with Community Members, Mayor, City Council members, School Board members, UTPA students





Off-road bike path





*Early Prevention of Diabetes
among Adults & Families
in Colonias*



Pilot Program – intervention and comparison groups

Weekly meetings (women, average age 35, obese on average)

Participatory lessons in healthy eating and exercise

Pedometers, daily recordings, walking groups

Celebratory meal at the end of 8 weeks

Results

- Intervention group: Statistically significant decline in body mass index (BMI)
- Control group: no difference in BMI

2015-2017: Continue in Weslaco area

People in colonias will take ownership of a culturally & economically appropriate program

A community-based participatory project can prevent obesity & thus, diabetes

Can active lifestyles become part of local valley culture?
Oaxaca City: Physical Activity in Public Space for Fun



~ 75 people in a group riding bicycles through the Zocalo

Oaxaca City, Zocalo



Evening Strolls to Music



Families & Balloons

U.S.A.: A rich nation, a poor quality of life

Our typical approaches for addressing obesity are reaching their maximum effectiveness; we need a new paradigm:

- Go to the gym → *Physical activity in daily tasks*
- Go on a diet → *Change way we eat*
- Change your body → *Change our mind*
- Don't do this → *Do that*
- Individual discipline → *Policy innovations, culture change*

**PULGA DE ALAMO, PUESTO 1125-1126,
cada domingo, 9 a.m.-1 p.m.**

**ESTAR EN
LA CUERDA
FLOJA**



**COMO HACER
PARA QUE NO
SE CAIGA**



**LA DIABETES SE
*PUEDE PREVENIR***

**MÁS VALE
PREVENIR**

NORMAL MENOS DE 5.7%

PRE-DIABETES A1C 5.7% -6.4%

CDC Working on Wellness Project

- Public Health + AgriLife Extension
- Grant program for counties with obesity: 40 %+
- 4 communities in Hidalgo County:

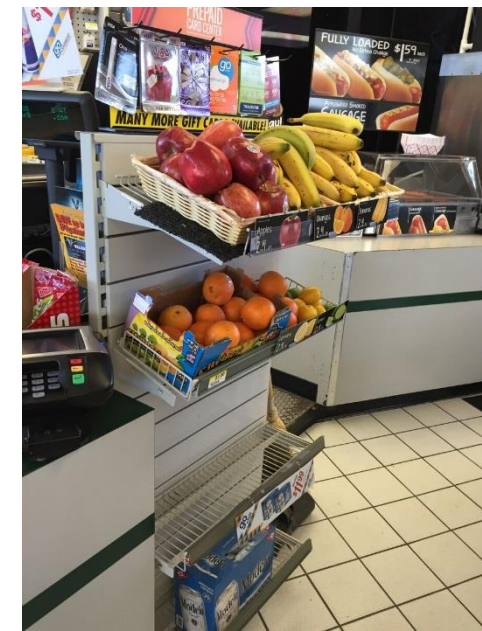
Weslaco

southwest McAllen

San Carlos

Penitas

Build & empower community coalitions



Improve Policy shaping Access to Healthy Food & Physical Activity

- Cost (in cash and in kind)
- How long does policy
change take?
- Who decides?
- How long does
implementation take?
- Is change sustained?



*No Cost;
Instant
change*

Recess BEFORE
LUNCH
playtime before lunchtime!

*Low Cost;
Quick to Start;
Requires
Personnel to
Start & Sustain*



*Walk to School
Repairs require
budget & time*



THANKS!

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McAllen Campus, Texas A&M School of Public Health

