Building Healthy Montana Communities by Design
Your Presenters

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Key points . . .

1. Physical activity is more important than ever.
2. Encouraging is not enough; “active environments” are needed.
3. Keys to success:
   - Truly interdisciplinary and inclusive collaboration.
   - Demonstrations and low-cost installations to build momentum.
   - Policy & systems change as the ultimate goal.
4. Intervention must happen on three scales:
   - Macro: Land use comes first, connectivity, mix of uses, efficiency & scale.
   - Meso: The network must be complete, and target safe, humane vehicle speeds to truly support walking, bicycling & transit.
   - Micro: Street level design, place-making, functional details must be on a human scale (e.g. from street furnishings to intersection designs).
% Meeting Full PA Guidelines
Whitfield et.al. *MMWR*; 68(23);513–518; June 2019

Guidelines - at least:
- 150 mins/week of moderate physical activity (30 min/d)
- Muscle strengthening several days/wk.
Vehicle Miles Traveled have risen inexorably for decades, with a slight slow down at $4/gallon gas and the Great Recession.
National vehicle miles traveled (in billions), 12-month increments
January 2000 - April 2020

Great Recession

Source: Brookings analysis of Federal Highway Administration data (January 2000 - January 2020); Streetlight Data data (January 2020 - April 2020).
WE STAND IN SOLIDARITY FOR


AND THE MANY OTHERS

Washington DC, June 7, 2020
Poll results: Which will be the greatest root cause of death in the US in 2020?

- Seasonal flu (typical)
- Opioid overdose
- Coronavirus (est.)
- Tobacco use
- Pedestrian collisions
- Inactivity/poor nutrition
- Motor vehicle collisions

### Poll: Greatest cause of premature death?

<table>
<thead>
<tr>
<th>Root causes</th>
<th>US annual deaths (typ.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pedestrian collisions</td>
<td>• 5,000-6,000</td>
</tr>
<tr>
<td>• Seasonal flu (typical)</td>
<td>• 34,000</td>
</tr>
<tr>
<td>• Motor vehicle collisions</td>
<td>• 37,000</td>
</tr>
<tr>
<td>• Opioid overdose</td>
<td>• 67,000</td>
</tr>
<tr>
<td>• Coronavirus</td>
<td>• 200,000-400,000 (est.)</td>
</tr>
<tr>
<td>• Inactivity/poor nutrition</td>
<td>• 400,000</td>
</tr>
<tr>
<td>• Tobacco use</td>
<td>• 480,000</td>
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Why does the built environment matter?

- We almost shut down the economy to keep an infectious disease that will likely kill 200,000+ Americans from killing many thousands more.

- Each year we suffer over 800,000 premature deaths to “lifestyle” risk factors (tobacco, physical inactivity, and poor nutrition).

- As little as 30 minutes of physical a day reduces risk for CVD, stroke, Type II diabetes, hypertension, obesity, osteoporosis, clinical depression, dementia in old age, and many cancers.

- Many chronic conditions dramatically increase risk for adverse COVID-19 outcomes.

- Both chronic and infectious disease are disproportionately burdening people of color and of low income across the US.
Four elements support active modes

- Mixed Land Use
- Network Connectivity
- Functional Site Design
- Safety & Access for All Users
1. Mixed destinations: Live, work, shop, play, learn, pray.
2. Connected Network for Walking, Biking & Transit

Sidewalks, on-road bike facilities, multi-use pathways and trails, transit.
3. Functional, Inviting, and Accessible Site Design

Street trees, lighting, plantings, seating.

Shared space, way-finding, public art.

Street front buildings, windows, awnings.
Increasing pedestrian & bike trips decreases injury & fatality risk per mile of exposure.

(Jacobsen, Pucher)
“Active routes to everyday destinations.”
Healthy design yields a triple bottom line.
Healthy communities with “2020” vision . . .

- **Truly inclusive**, interdisciplinary teams can make great progress; may need a facilitating entity.

- **Low-cost demonstrations & pop-ups** can answer questions, overcome fears, support detailed plans.

- Ultimate goal is policy and systems level change: **Complete Streets policy**; **growth plans & zoning ordinances** protecting open space and encouraging walkable centers; **school transportation plans** focused on walking & bicycling.
Typical “coalition:”

- YMCA
- AARP
- ACS
- AHA
- Health
- Rec.
- Transit
- Parks
- Planning
- Trails
- Transport
- Electeds
- DPW
- School
- Neighbors
- Housing
- Developers
- PTOs
- Bike/Ped Advocates
- Employers
- Hospital
- Insurer
The “stealth” team:
Fully inclusive community engagement

Helena Livingston
ruralinstitute.umt.edu

Louisville KY
Pop-up & demonstrations can help. (Walk/bike to school week.)
Pop-up curb extensions

Enosburg Falls, VT
Leadership walk audit
In this session we wish to:

- Provide pathways to health
- Build sustainable, resilient urban places
- Make active transportation the easy choice
- Cover basic principles on why we must return to past town making principles
- Stop squandering the resources of future generations
- Develop a sense of urgency
Recommendations:

• Formally adopt NACTO Street Design Guide, with the potential to later create a guide unique to Salinas.
• Formally adopt a Complete Streets Policy for the City of Salinas.
• Create a Complete Streets Implementation Plan.
• Set Target Speeds on principal roads.

Recommendations:

• Adopt an Urban Design Manual to simplify and streamline current code alignment.
• Support implementation of Parking Management Plan.
• Pursue citywide Transportation Demand Management strategies.
• Promote housing diversity, affordability and infill through ADU-focused policy efforts.

Recommendations:

• Create a Vision Zero Action Plan.
• Develop a Safety Education Campaign.
• Create School Slow Zones with appropriate corresponding design treatments.
• Develop a Salinas Safe Routes to School Master Plan.
Land Use
The simple needs of automobiles are more easily understood and satisfied than the complex needs of cities.

Jane Jacobs, *Death and Life of Great American Cities*, 1961
Not a good place Seniors

Poor Location for Shopping Plaza

Transit allows me to see my friends at the senior center.

Not a good place people with disabilities

Best Location for Shopping Plaza

This new bike trail allows me to get to the park safely.

Not a good place for the town hall

Not a good place for multi-family
Fort Pierce, Florida. (circa a long, long time ago)
Low Internal Capture Rate
Low Connectivity
Low/No Mix of Uses
Light Density, Low Yield/Acre
High Parking Requirements
Solar Heat Sinks, Little Space for Green
High Internal Capture Rate
High Connectivity
High Mix of Uses
Moderate Density, Good Yield/Acre
Moderate Parking Requirements
Space for Green
Orlando, Florida

1550 Feet from NOTHING
Transportation
A Balanced Transportation System -

Allows all people of all ages and abilities full access to all parts of their community. Switching from one mode of travel to another is seamless.

To achieve this requires a close partnership with land use and transportation.

Quality of life and health increase as policies, programs, and people are considered in each and every decision, and budget, we set in motion.
Complete Streets Support Livability

Complete Streets accomplishments are a matter of degree (from hostile to place).

Streets that are openly hostile to walking and livability suffer from reduced land value. Under most state income streams, this robs from taxpayer paid funding.
Centerline Removal

Roadway centerlines are required by the Manual on Uniform Traffic Control Devices for roadway volumes over 6,000 vehicles per day. On lower volume roads, consider dropping the center line, then adding edge lines spaced 18 feet apart from one another. This practice can have several desired effects. Motorists tend to slow their speed, give a wider berth to bicyclists, pedestrians and people exiting their cars. The centreline should remain at curves and where visibility is limited. Also note the added value of “double facing” crossing signs.
ACTIVE TRANSPORTATION BASICS

Target Speed
Local Streets and Bicycle Boulevards
Collector Streets and Road Diets
Arterial Roads
Getting Across the Street
The concern of residents regarding traffic speeds is based on their perception of threat. This perceived danger is supported by the traffic crash science, presented in this chart. Harm increases exponentially as speed increases. A pedestrian’s survival rate drastically changes if hit by a vehicle traveling at 20, 30 or 40 miles per hour.

For residential areas, a posted speed limit of 25 miles per hour or lower is appropriate. When streets are designed to allow higher speeds, higher speeds are induced.

Streets should provide a safe and comfortable travel for all modes.
As a general rule, Complete Streets bring a road back into a form preferred by residents, allocating only as much space needed by motorists, and applying other space to residents, placemaking, nature, drainage, people using transit, walking or bicycling.
Both streets are “collectors.” Which design adds the greatest value to a home and hence the tax base?
Design for People Road Diets

The wider a roadway, the faster people tend to drive. In many downtowns, the desire to speed motorists out of town at the end of the workday led to roads being built too wide, with too many lanes. This is detrimental to commercial activity and walkability. One possible solution is a road diet.
Thirty-seven percent of the public self-rate their interest to bike at zero. This leaves sixty-three percent who are looking for more active transportation supports than we are providing today. The Strong and Fearless and Enthusiastic and Confident crowds are being served. Infrastructural investments should support the fifty-one percent who are Interested but Concerned.
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Effective Public Engagement for Systems Change

Why do so many neighborhood plans fail to get off of the shelves?

Successful public engagement is essential if we are to reverse decades of incentivizing auto trips over the needs of a neighborhood. In the scene to the left, the Michigan DOT realized that a crucial sidewalk was missing (where the homes are). They scheduled an open house style meeting. The result: 300 people showed up to oppose the sidewalk. Why? They wanted to look rural and sidewalks, they said, "are an urban thing."

To move forward, The Heights neighborhood must build and defend its own vision. There will be opposition. Those who take part in advancing the future must become informed, and then work tirelessly to get their plan on the ground.
Summary

• **Active environments** support environmental, economic, and public health. More important now than ever.

• **Interdisciplinary teams** w/ community vision are key.

• **Pop-ups & demonstrations** educate & build momentum; but the ultimate goal must be **policy & systems level change**.

• **Land Use comes first**, the right connectivity, mix of uses, locational efficiency are essential.

• **Target Speeds matter**; if our streets are only for regional travel we cannot support walking, bicycling and transit

• **Getting across the street** requires compact intersection designs, mid-block crossings, roundabouts – human scale!
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