Panel 1
Land Use & Design
9:15 to 9:55 a.m.

Melissa Zornitta
Executive Director
The Planning Commission

Lucia Garsys
Deputy County Administrator
Development & Infrastructure
Hillsborough County

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Vision Zero a road safety policy innovation
Transforming Transportation
VISION ZERO

• October 1997 the Swedish Parliament passed a new bill on Road Traffic Safety

• the design and functioning of the road transport system must be adapted to the requirements resulting from this ruling.

• long-term goal no one should be killed or seriously injured as the result of an collision within the road transport system
**Ethics**: Human life & health are paramount & take priority over speed & other objectives of the road traffic system.

**Responsibility**: providers & regulators of the road traffic system share responsibility with users.

**Safety**: road traffic systems should take account of human fallibility & minimize the opportunities for errors & the harm done when they occur.

**Mechanisms for change**: providers & regulators must do their utmost to guarantee the safety of all citizens; they must cooperate with road users; & all three must be ready to change to achieve safety.
Probability of Pedestrian Fatality by Impact Speed

Figure 2: Probability of Pedestrian Fatality by Impact Speed. Derived from the Interdisciplinary Working Group for Accident Mechanics (1986) and Walz, Hoefliger and Fehlmann (1983)
Hit by a vehicle traveling at 20 MPH: 9 out of 10 pedestrians survive.

Hit by a vehicle traveling at 30 MPH: 5 out of 10 pedestrians survive.

Hit by a vehicle traveling at 40 MPH: only 1 out of 10 pedestrians survives.

<table>
<thead>
<tr>
<th>Speed</th>
<th>Distance to Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>30mph</td>
<td>78 feet</td>
</tr>
<tr>
<td>50mph</td>
<td>186 feet</td>
</tr>
<tr>
<td>70mph</td>
<td>372 feet</td>
</tr>
</tbody>
</table>
Three Types of Safety

Legal Safety
(Freedom from Liability, Practices, Street Design Guidelines, Policy)

Statistical Safety
(Vision Zero)

Perceived Safety
(Comfort, Decision-Making, Value)
Three Types of Safety

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Complete Streets
Three Types of Safety

- **Perceived Safety**
  (Comfort, Decision-Making, Value)

- **Statistical Safety**
  (Vision Zero)

- **Legal Safety**
  (Freedom from Liability, Practices, Street Design Guidelines, Policy)

Diagram showing categories of safety:

- Complete Streets

Categories:

- Mobile
- Static
- Vulnerable

Graphical representation of safety categories.
Three Types of Safety

Perceived Safety
(Comfort, Decision-Making, Value)

Statistical Safety
(Vision Zero)

Legal Safety
(Freedom from Liability, Practices, Street Design Guidelines, Policy)

Conventional Practice

Complete Streets

Mobile

Static

Vulnerable
Three Types of Safety

- Perceived Safety (Comfort, Decision-Making, Value)
- Statistical Safety (Vision Zero)
- Legal Safety (Freedom from Liability, Practices, Street Design Guidelines, Policy)

Better Policy Environment

Complete Streets
Mobility (in the past)

the movement of people & goods

assumption: faster, farther, and in greater numbers means progress for society
Mobility (now and in the future)

The populations’ capabilities and strategies to move in order to access what they need to live within the city.
Mobility (now and in the future)

The populations’ capabilities and strategies to move in order to access what they need to live within the city.

Many Populations: young people, elderly, disabled, different income levels, millennials, pedestrians, cyclists, transit users, students,....
Mobility (now and in the future)

The populations’ capabilities and strategies to move in order to access what they need to live within the city.

the movement is purposeful:

<table>
<thead>
<tr>
<th>Trip Type</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>work</td>
<td>18.0</td>
</tr>
<tr>
<td>work-related</td>
<td>2.6</td>
</tr>
<tr>
<td>shopping</td>
<td>20.2</td>
</tr>
<tr>
<td>doctor/dentist</td>
<td>1.5</td>
</tr>
<tr>
<td>family/personal</td>
<td>24.2</td>
</tr>
<tr>
<td>church/school</td>
<td>8.8</td>
</tr>
<tr>
<td>social/recreational</td>
<td>24.5</td>
</tr>
<tr>
<td>other</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Hello? Mixed land use and density reduce my average weekend trip length by about 85%
Mobility (now and in the future)

The populations’ capabilities and strategies to move in order to access what they need to live within the city.
Mobility

How are the best cities in the world growing their populations and economies while shrinking traffic?
Mobility

How are the best cities in the world growing their populations and economies while shrinking traffic?

They have a complete understanding of “mobility”
Universal Transportation and Land Use Planning Equation

(the essential four planning metrics for better built environments)
Universal Transportation and Land Use Planning Equation

(the essential four planning metrics for better built environments)

Public Policy Statement

- It is good public policy to
  1) reduce VMT by:
  2) reducing the percentage of trips made by automobile;
  3) increasing vibrancy (a.k.a. the number of trips of all kinds); and
  4) reducing the average trip lengths for each mode, especially automobiles.

Four Measures of Effectiveness (4 MOEs)

- Vehicle miles travelled (VMT) = modal split automobile \times total number of trips all travel modes \times average trip length automobile
Universal Transportation and Land Use Planning Equation
(the essential four planning metrics for better built environments)

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Four Measures of Effectiveness (4 MOEs)

vehicle miles travelled (VMT)

modal split automobile

total number of trips all travel modes

average trip length automobile

Examples of Related Components

- VMT per capita
- VMT total for the city
- VMT per resident
- VMT per employee
- VMT per visitor

- build sidewalks
- transit priority
- transit funding
- complete streets
- tax reform
- teleworking
- congestion pricing
- safe routes to school
- build bike infrastructure
- automobile parking reform
- lower automobile subsidies
- incentivize active transportation
- transportation demand management
- increase comfort for walking and cycling
- build engaging street and trail environments

- social trips
- shopping trips
- work trips
- recreational trips
- active trips
- educational trips
- cultural trips
- leisure trips
- combined trips

- increase land use densities
- increase land use mix
- increase connectivity
- slow design, operating, and posted speeds
- increase accessibility
- restore 2-way operations on 1-way streets
- replace highways in cities with urban infrastructure
- suburban/urban tax reform
- rural preservation
- planning policy reform
Grand Makeover Is Set for Maryland Strip City

by EUGENE L. MEYER

Rockville Pike, heading north.

Above, a rendering of the White Flint plan, which seeks to create a walkable community.
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Thank You!
Discussion Time