

# Community Driven Engagement in Transportation Decisions: A Livability Study in the District of Columbia

*Yolanda Takesian, AICP, PTP*  
*Samuel Jordan, JD*

**San Diego, February 3, 2012**



**KITTELSON & ASSOCIATES, INC.**  
TRANSPORTATION ENGINEERING/PLANNING

# Livability applied to transportation planning

- › Looks beyond traffic service function
- › Focuses on all users of streets & the network
- › Recognizes transportation facilities and services affect community life
  - *Economic Opportunity*
  - *Public health*
  - *Housing*
  - *Cultural resources*
  - *Natural environments*
- › Treats streets as public places
  - *Safe Passages*
  - *Sustainable Living*
  - *Prosperous Places*



# Interstate Highway System Legacy

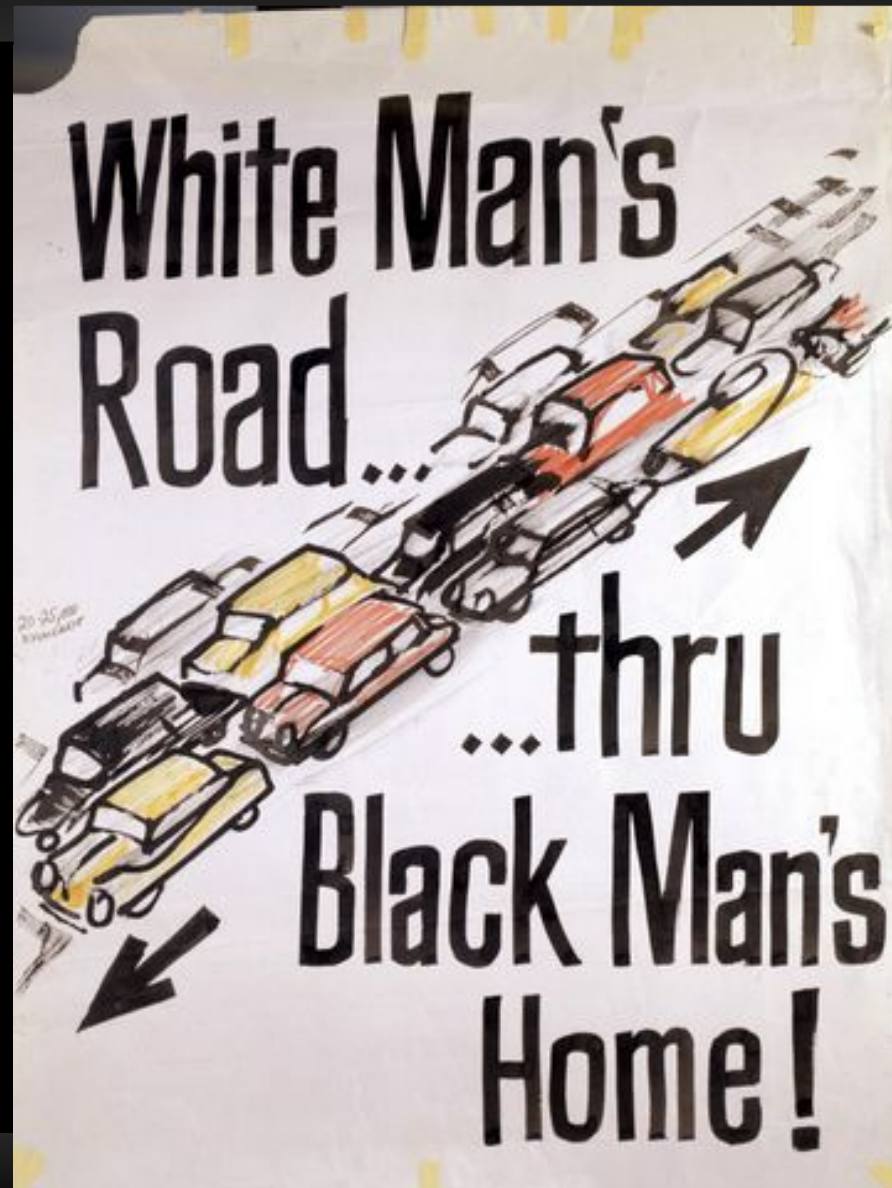
- › Interstate Highway & Defense Act of 1956
  - *41,000 miles limited access highway arterial*
  - *1956 – 1972 largely complete*
  - *90% federally funded*
- › Designed to evacuate central cities; the focus of metropolitan economies and people
  - *Laid out “circum-linear concentration”*
  - *Fragmented neighborhoods*
  - *Through least expensive land; low lying areas, farm land*





# Livability: The Potential for a New Approach

- › Displacement fears
  - *Emergency Committee on the Transportation Crisis (ECTC)*
  - *Gentrification priced out renting families elsewhere*
- › Mixed track record of successful public projects
  - *4 Metrorail stations...*
  - *Cut less expensive bus service forcing a transfer*
- › High transportation need
  - *40% HH transit dependent*
  - *Few goods & services*
- › Structure of civic and neighborhood organization
  - *ANCs & Civic Associations*





# The Far Northeast Livability Study Area

- › 3.5 Square Miles
- › 12 Neighborhoods
- › Significant commuter oriented transit available
  - *Two Metrorail routes with 4 stations*
  - *High frequency bus service*
  - *Streetcar planned on 2 “Great Streets” corridors with redevelopment envisioned*
- › Half of Ward 7’s 70,000 residents
  - *13% of households are subsidized*
  - *23% of city’s public housing residents*
  - *14% are seniors*



# Goals of FNE Planning Process

- › Provides two-way education
  - *Agency gains more complete picture of issues*
  - *Community learns how the agency makes decisions, what solutions can solve problems*
- › Clear project benchmarks
  - *All know what decisions will be made when*
- › Offers flexibility and creativity
  - *Activities tailored to community needs*
  - *Timeline to fit communication needs*
- › Supports an effective standing community advisory committee
  - *An extension of the technical team*
  - *Creates organization for ongoing monitoring*
  - *Offers leadership potential to residents*
  - *Extends to other community-based needs*

## A Self-Reliant People

### GREATER DEANWOOD HERITAGE TRAIL



Long a country town at the edge of Washington, DC's urban center, Greater Deanwood rose from former slave plantations. It became one of Washington's earliest predominantly African American communities. Follow this trail to meet the individuals who forged this oasis of self-determination and discover the hand-crafted dwellings, parkland, families, and institutions they created.



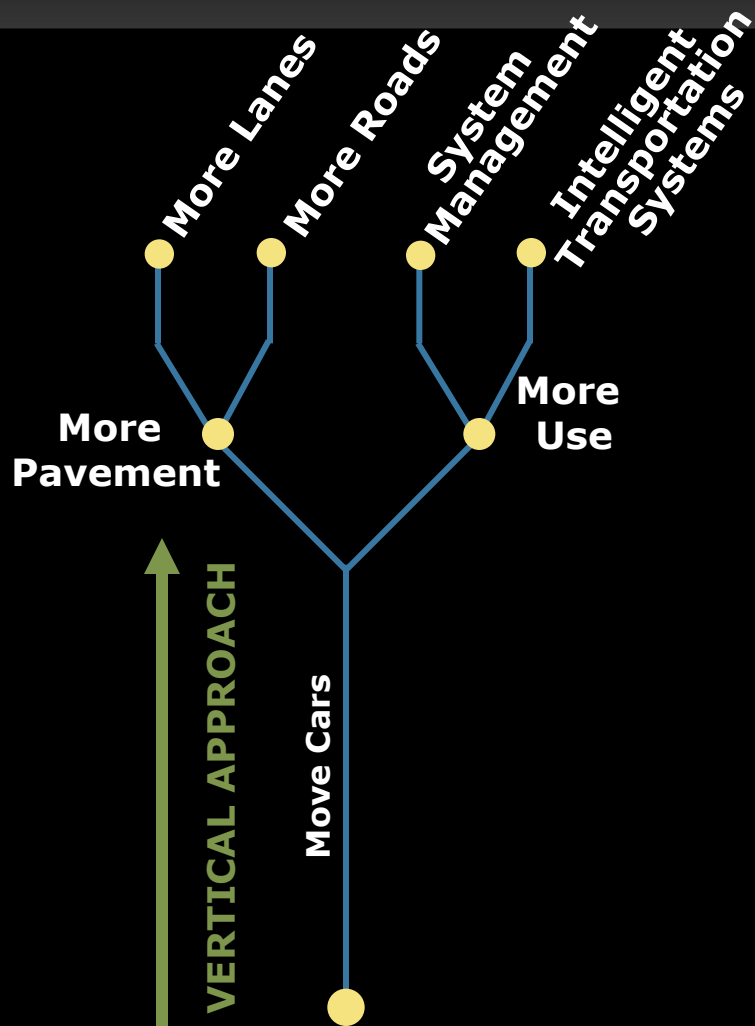
# Livability Community Outreach Advisors

- › Recently active in community planning
  - *Over 35 recent planning efforts*
- › Represent full range of community geography, values and interests
  - *History*
  - *Clean, Green & Safe Initiatives*
  - *Senior & Neighborhood Issues*
  - *Bicyclists & Transit riders*
- › Willing & committed to serve
  - *As outreach advisors*
  - *To be identified with the process*
  - *As eyes & ears in the community*
- › Track record of effective outreach
  - *ANC & Civic Associations*
  - *Bloggers & Activists*
- › Engaged in community projects





# Defining the problem: the tradition approach

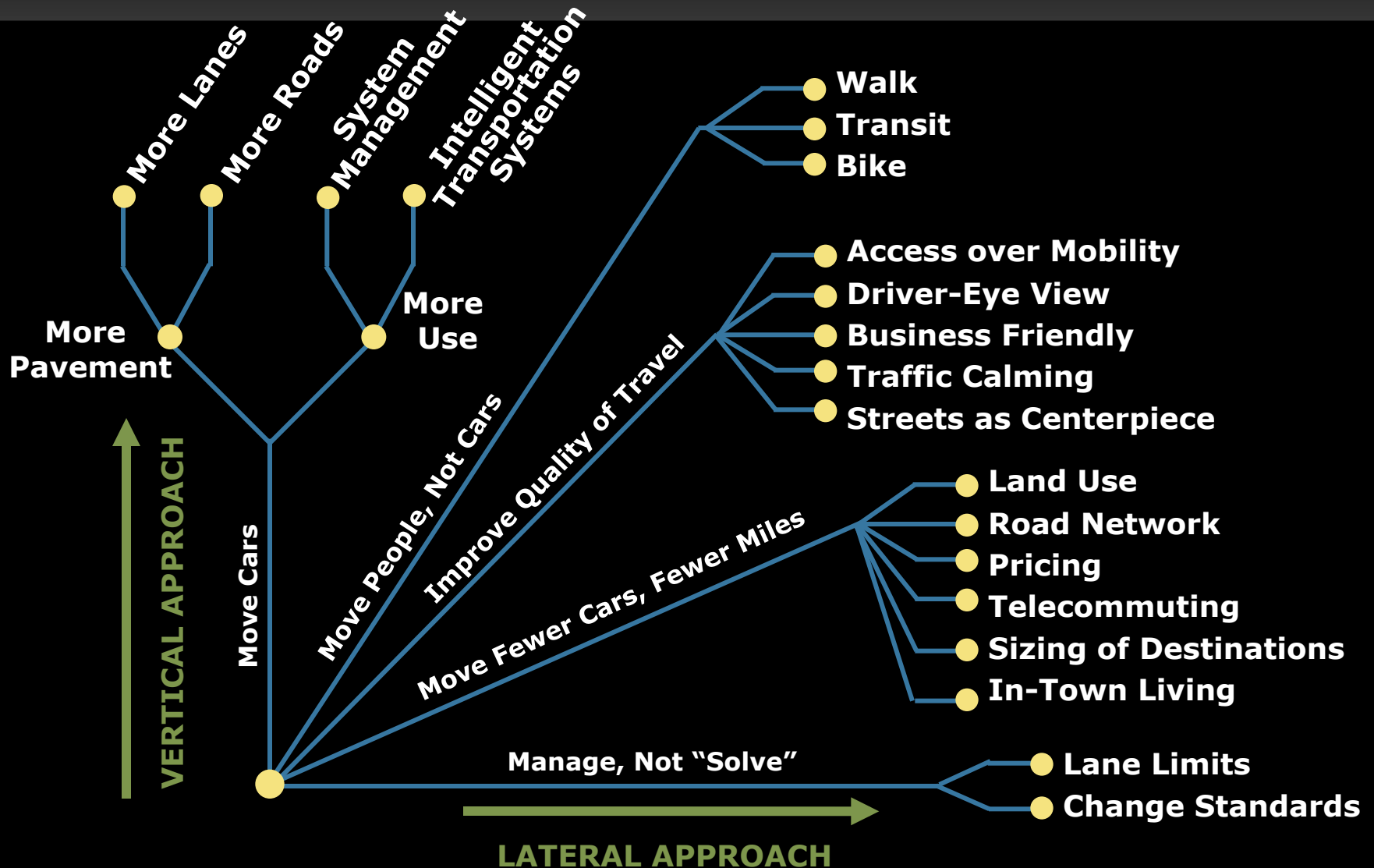


Mary T. Raulerson, KAI



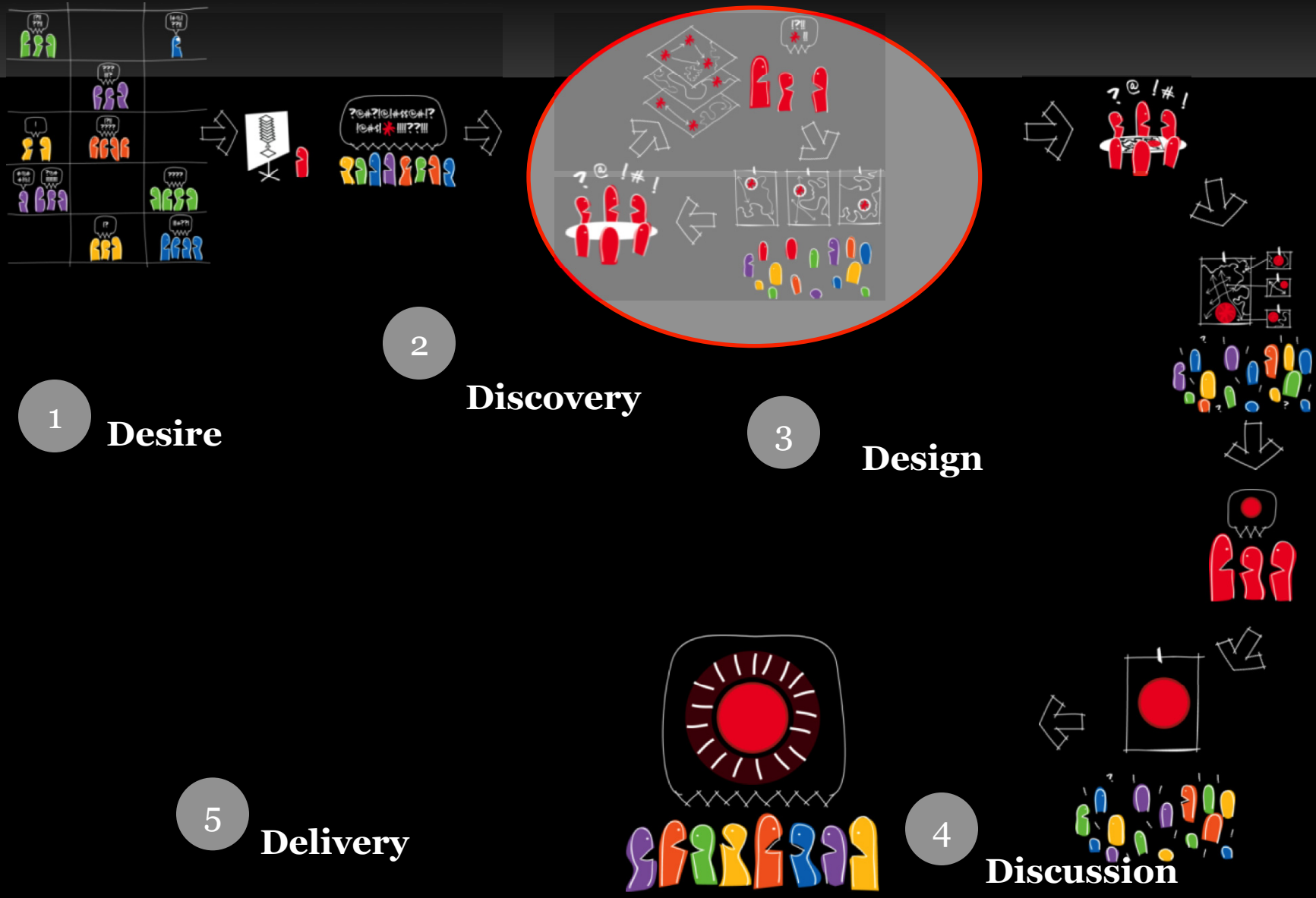
KITTELSON & ASSOCIATES, INC.  
TRANSPORTATION ENGINEERING/PLANNING

# gives way to more comprehensive solutions



Mary T. Raulerson, KAI

# Designing & Communicating the Planning Process





# Phase 1: Desire

- › Establishes Project Focus
- › Learn issues
- › Identify opportunities
- › Confirm project goals and measures of effectiveness.



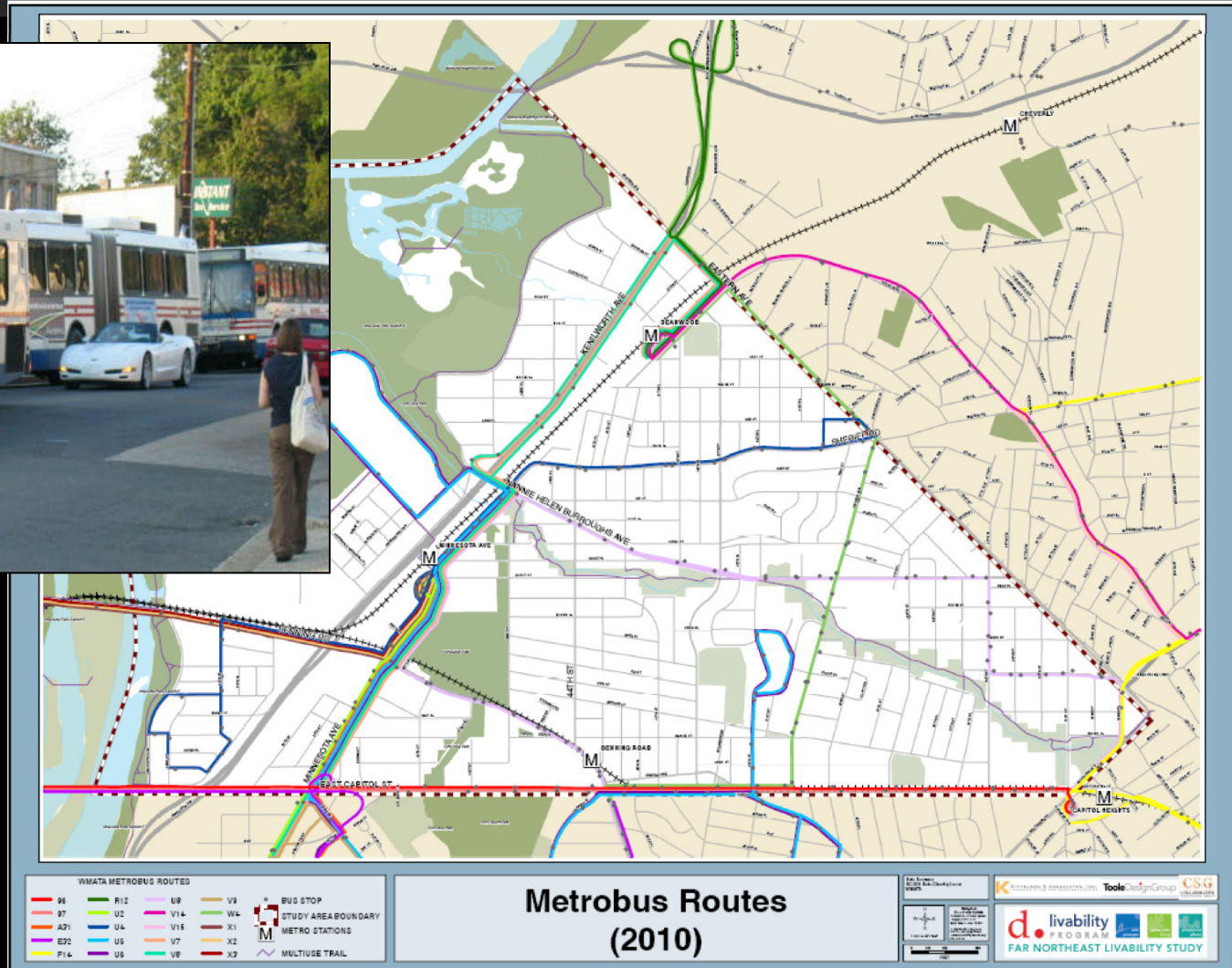


# Important destinations nearby and beyond





# Transit connections: What's available now and what's planned

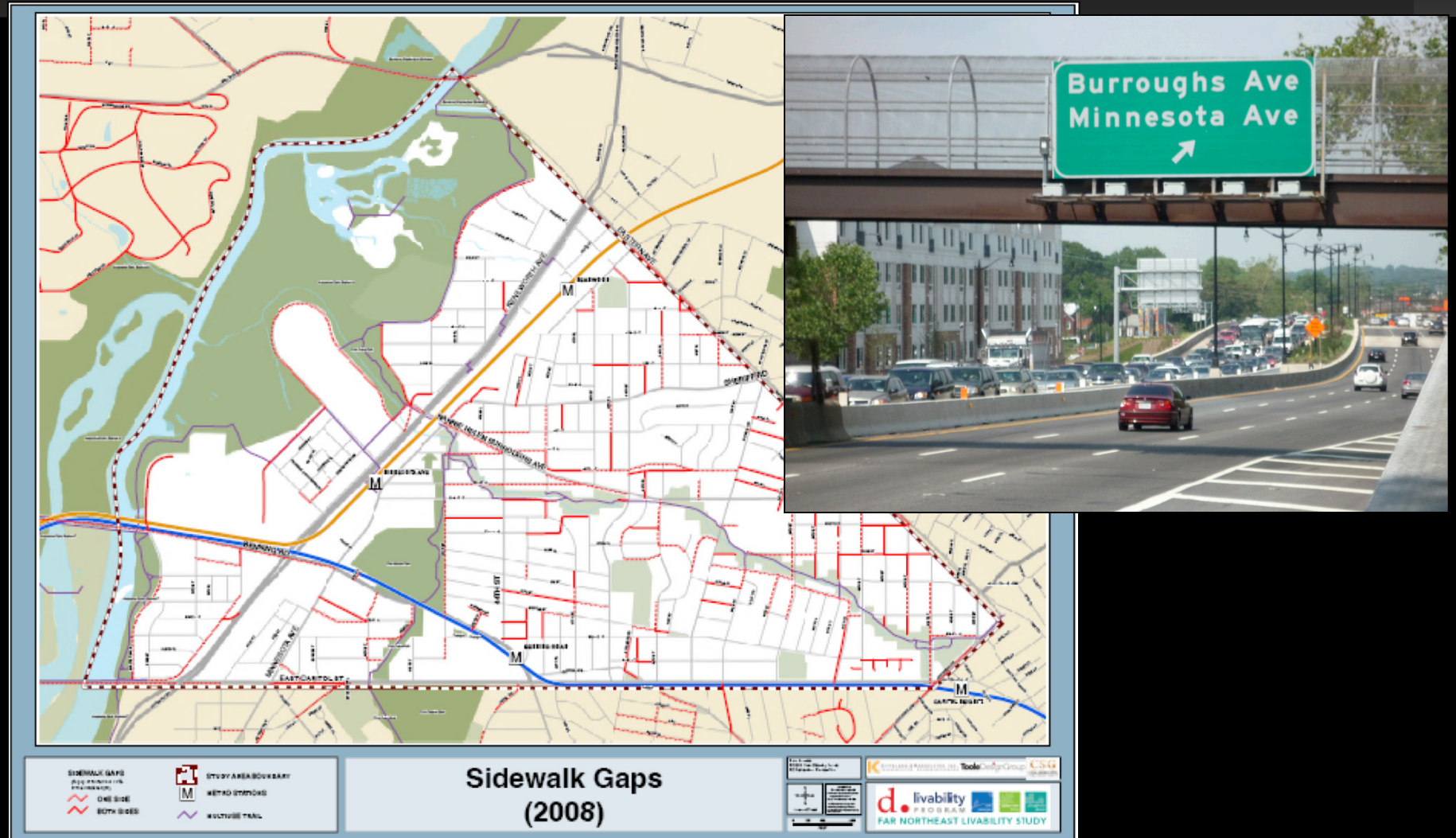




# Transit access, stops conditions & demand



# Sidewalks, crosswalks & other pedestrian accommodation





# Pedestrian crossing safety

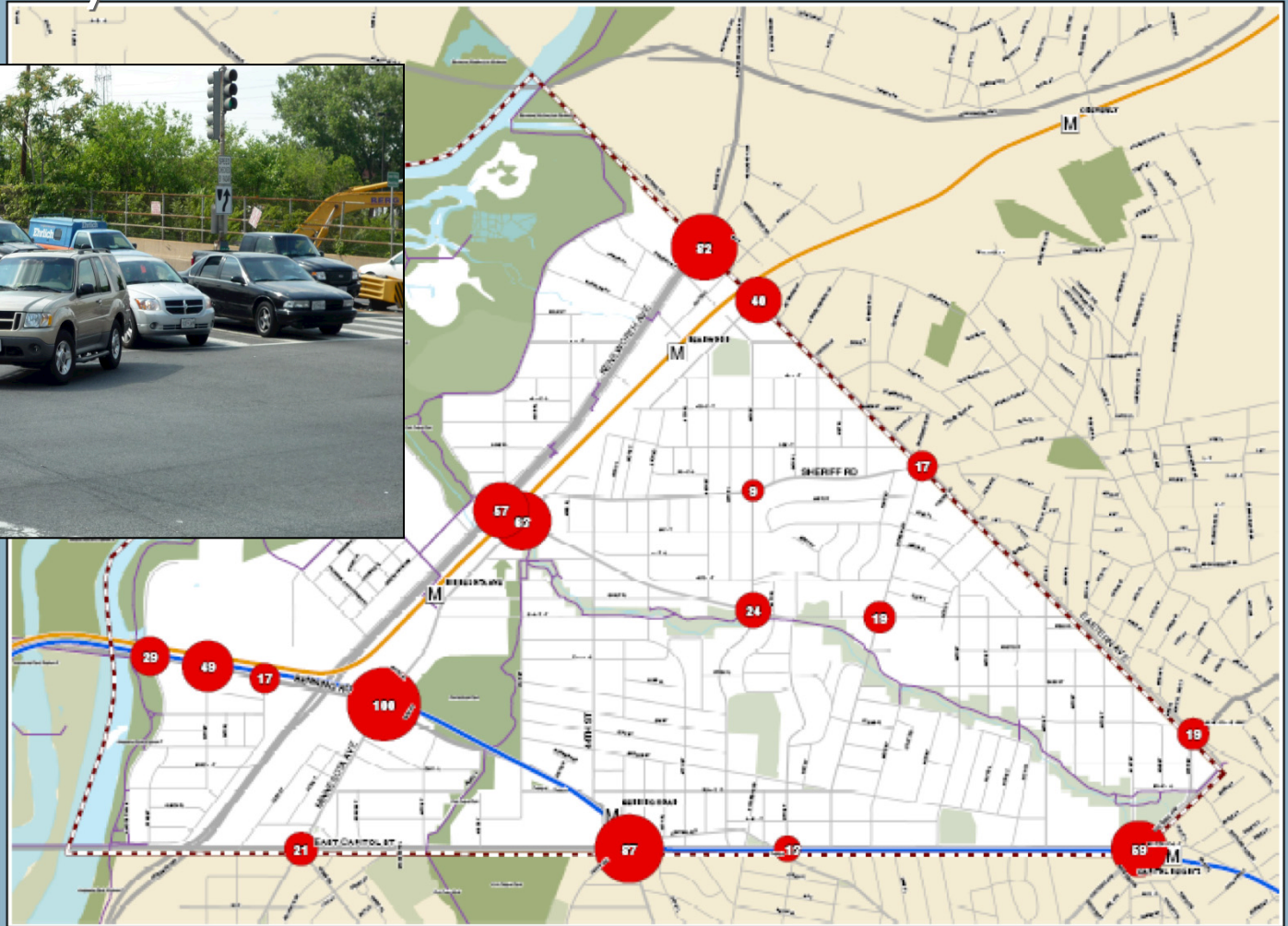


- PEDESTRIAN CRASHES
- 1
- 2 TO 5
- MORE THAN 5
- ▭ STUDY AREA BOUNDARY
- M METRO STATIONS
- MULTIUSE TRAIL

**Pedestrian Crash Locations  
(2005-2007)**



# Traffic safety



**VEHICLE CRASHES**  
 10 OR FEWER  
 11 TO 49  
 50 OR MORE

**STUDY AREA BOUNDARY**  
**M** METRO STATIONS  
 EXISTING TRAIL

**High Vehicle Crash Locations  
(2006-2008)**

Kittelson & Associates, Inc. | Tilden | CS4  
**d. livability**  
 PROGRAM  
 FAR NORTHEAST LIVABILITY STUDY

# Expressed concerns

- › Inadequate Bus stops
- › Late & crowded buses
- › Needed bus connections within the Ward
- › High speeds on major neighborhood corridors
- › Cut through traffic local streets
- › Many intersections unsafe for pedestrians
- › Lack of bicycle facilities



**FAR NORTHEAST**

Please use the map below to indicate locations of missing sidewalks, parking, streets with high transportation challenges

1. MARK THE MAP

Zoom and pan the map to

2. COMMENTS BOX

Please be as specific as possible

Your thoughts\*

3. YOUR INFORMATION

This information is optional and will not be displayed.

Name\*

Email\*



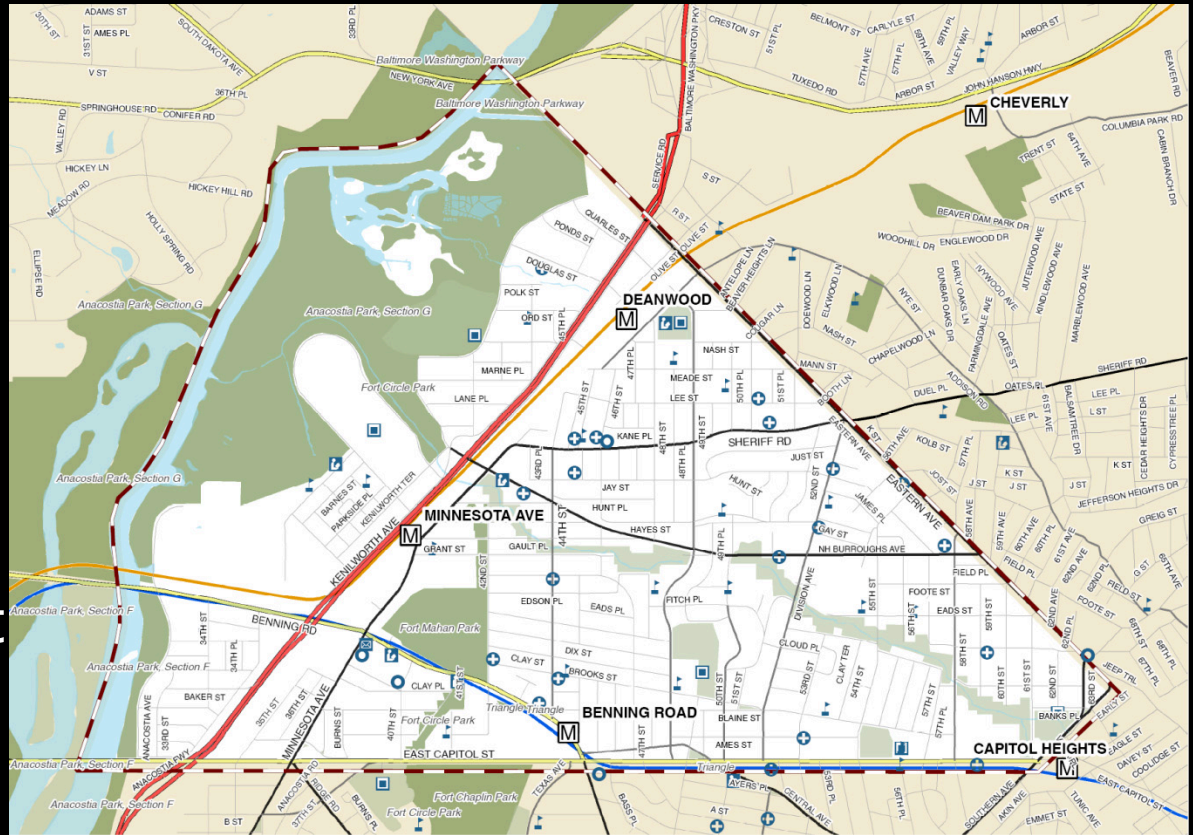
# Phase 2: Discovery

- › Do Our Homework
  - *Review previous plans*
- › Develop an accurate picture of the area's existing conditions
  - *physical*
  - *transportation*
  - *land use*



# What we found

- ▶ Limited connections across the river funnel traffic onto a few primary streets
- ▶ Key pinch points filter problems back through neighborhood streets
- ▶ Intersection & street design prioritizes auto rather than walking, bicycling & transit





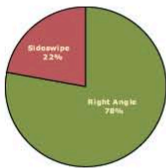
# CORRIDOR LOCATIONS

## Sheriff Road/Lee Street/Jay Street – 44th Street/45th Street/46th Street

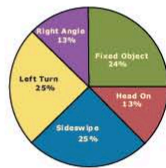


### Crash Data (2007–2009)

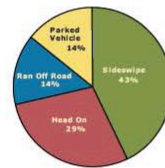
Sheriff Road/44th Street – 9 Crashes



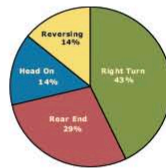
Sheriff Road/49th Street – 8 Crashes



Sheriff Road/45th Street – 7 Crashes



Sheriff Road/Eastern Avenue/Division Street – 7 Crashes



### LEGEND

- POINTS OF INTEREST**
- Traffic Signal
  - Church
  - Bus Stop
  - Hospital
  - Library
  - Post Office
  - Rec Center
  - School
  - Shopping
  - Stadium
  - Fire Station
  - Vehicle Crashes (2007 – 2009)
  - Rec Center
  - School
  - Shopping
  - Stadium
  - Fire Station
  - Pedestrian Crashes (2007 – 2009)
  - Stop Sign
- ###/### 85th Percentile Speed/ Posted Speed Limit  
 ### Daily Traffic Volume
- \* The speed at or below which 85% of people drive under normal conditions.



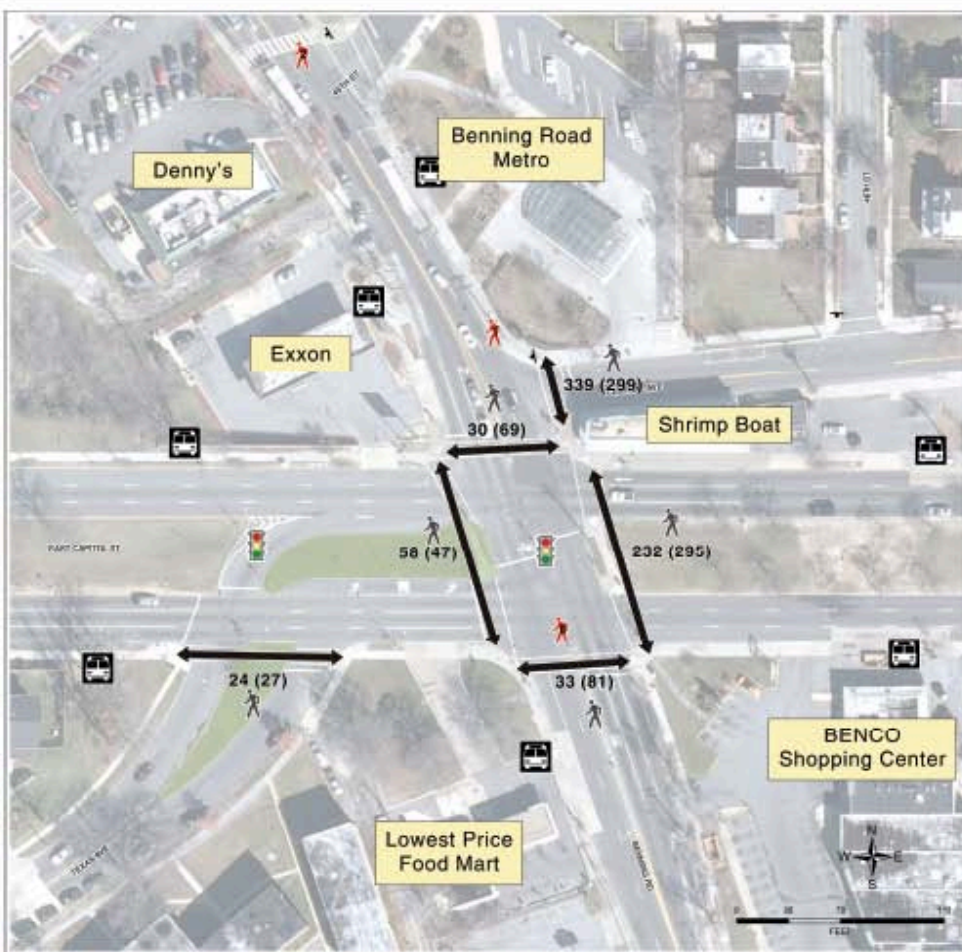
### LEGEND

- Other Freeway and Expressway
- Interstate
- Principal Arterial
- Minor Arterial
- Collector
- Local Street



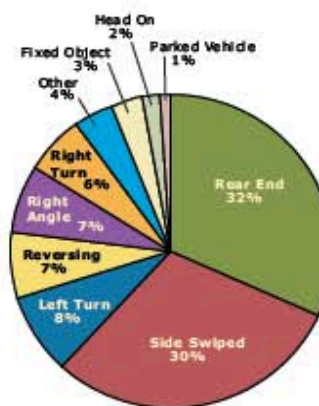
# INTERSECTION LOCATIONS

## Benning Road/E. Capitol Street/Central Avenue/Texas Avenue

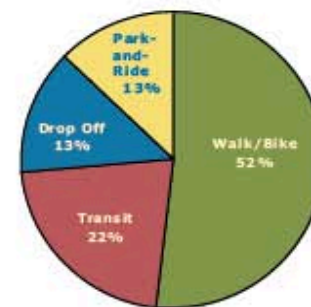


### Crash Data (2007-2009)

96 Crashes



### Benning Road Metro Station Access Data (2005)



# Phase 3: Design

- › Develop the Plan Together
- › Informed by multiple disciplines & experiences
  - DOT Staff present
- › An open public format
  - Community leaders host
- › Education tools & techniques



## Solutions Toolbox: Crossing Treatments



### In-Street "Yield for Pedestrians" Signs

Signs placed in the middle of crosswalks to increase driver awareness of pedestrians and the legal responsibility to yield right-of-way to pedestrians in crosswalk.

ADVANTAGES	CHALLENGES	LOCATION TYPE
<ul style="list-style-type: none"> <li>Increases the number of motorists that yield to pedestrians in the crosswalk.</li> <li>Reinforces the right of pedestrians in the roadway.</li> </ul>	<ul style="list-style-type: none"> <li>If used too often, motorists have a tendency to ignore the signs.</li> </ul>	<ul style="list-style-type: none"> <li>Areas with high mid-block coverage and/or poor yielding rates by motorists.</li> </ul>



### High Visibility Crosswalks

Clear, reflective roadway markings and accompanying devices at intersections and priority pedestrian links, located only where motorists should expect pedestrians with sufficient sight distance and reaction time.

ADVANTAGES	CHALLENGES	LOCATION TYPE
<ul style="list-style-type: none"> <li>Warns motorists of potential for pedestrians.</li> <li>Designates a preferred location for pedestrians.</li> <li>DC Law requires motorists to stop for pedestrians in crosswalks.</li> </ul>	<ul style="list-style-type: none"> <li>Most effective with other traffic control (signals, stop sign) or physical treatments (bulb-outs) that help to reinforce crosswalks and support reduced vehicle speeds.</li> <li>Motorists may ignore.</li> </ul>	<ul style="list-style-type: none"> <li>All intersections and preferred mid-block crossing locations.</li> </ul>



### Raised Crosswalk

A pedestrian crossing area raised higher to give motorists and pedestrians a better view of the crossing area. A raised crosswalk is essentially a speed table marked and signed for pedestrian crossing.

ADVANTAGES	CHALLENGES	LOCATION TYPE
<ul style="list-style-type: none"> <li>Provides better view for pedestrians and motorists.</li> <li>Slows motorists travel speeds.</li> <li>Broad application on both signal &amp; unsignal streets.</li> </ul>	<ul style="list-style-type: none"> <li>Can be difficult to navigate for large trucks, buses, and snow plows.</li> </ul>	<ul style="list-style-type: none"> <li>Areas with high speeds and/or difficult crossing event.</li> </ul>

## CORRIDOR TREATMENTS

- Select your top five (5) focus locations in order of your preference.
- Check the type of treatment that you prefer and note any specific treatments.
- Add any locations that are missing in the blank rows. Your Solutions Toolbox can help to clarify how each of the treatments works.

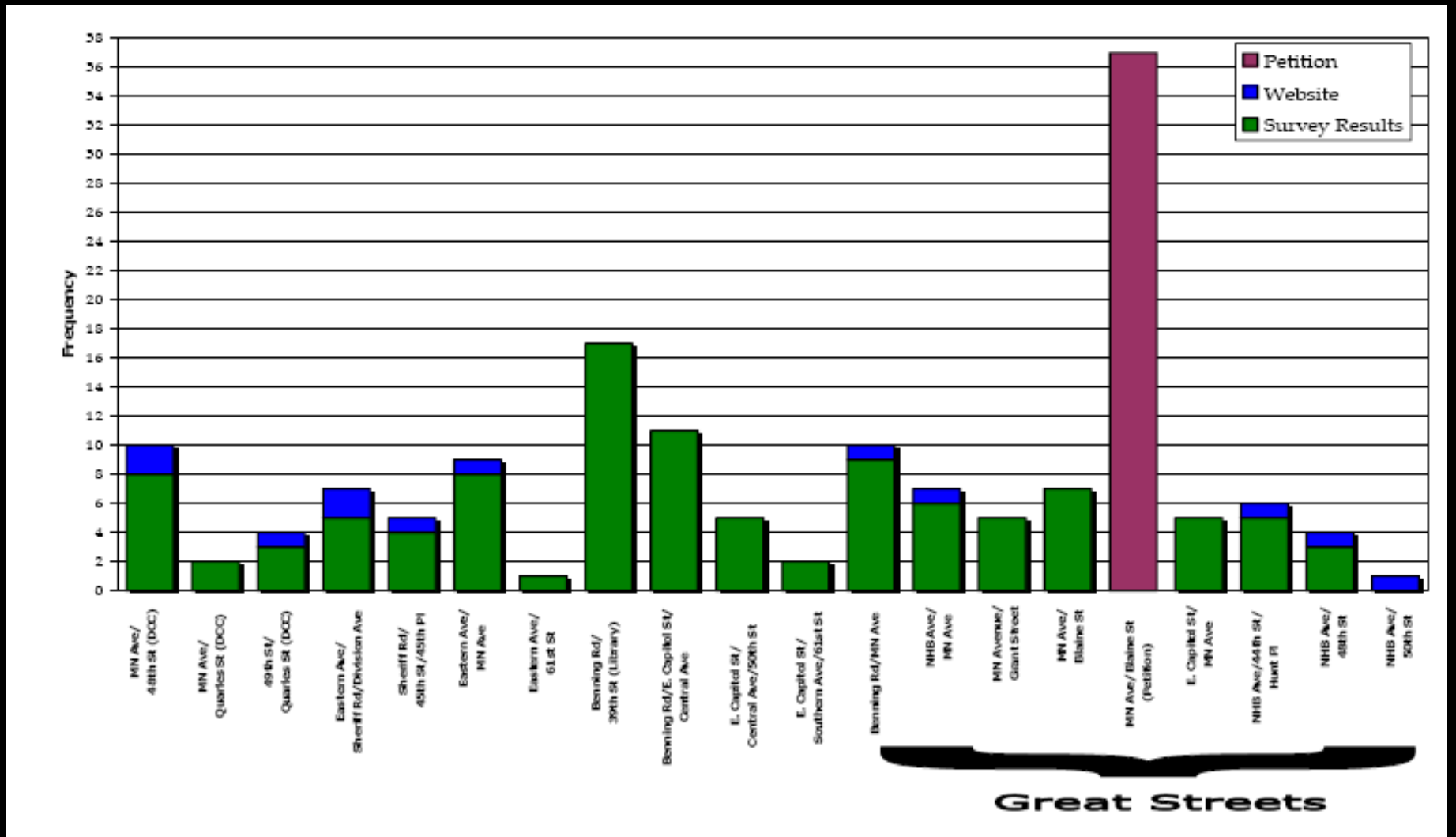
Priority Location	Crossing Treatments (at unsignalized crossings)			High Vehicle Speed Treatments			High Visibility Treatments
	Point-to-Point Markings	Revised Street Elements	Pedestrian and/or Bicyclist Priority Markings	Travel Lanes	Revised Pavement	Street Narrowings	
Focus Locations: Consider	In-Street "Yield" for Ped Signs, High Visibility Crosswalks, Revised Mid-Block, etc.	Revised Crosswalks, Curb Extensions, Revised Median Islands, Revised Median Refuge Area	Revised Pavement, Pedestrian and/or Bicyclist Priority Markings, Hybrid Signal (HAWK)	Reduce # of Travel Lanes, Reduce Size of Travel Lanes, Move Parking, etc.	Revised Pavement, Speed Tables, Speed Bumps, Speed Tables	Chicanes, Ditches, Side Cuts, Traffic Calks, Raised Intersections, Reduced Curb Radius (at driveway corners)	Half Closures, Bi-Directional, Full Closures, Revised Lane Median Refuge, Full Closure
Example Corridor #1			Pedestrian Signal (HAWK)	Reduce # of Travel Lanes	Speed Table		Revised Turn
Example Corridor #2	In-Street "Yield" for Ped Signs	Revised Crosswalks, Curb Extensions				Chicanes, Traffic Calks	
Start W Road							
4th Street							
Dixson Avenue							
Jay Street							
Lee Street							
Hart Pl/Hoyes St/Quail Pl/Driver Street							
4th St/4th St/40th Street							
42nd Street							
Ames Street							
E Capital Street							
<b>Programmed DDOT Design Projects</b>							
Missouri Avenue	High Visibility Crosswalks	Revised Median Islands/ Pedestrian Refuge Areas, Curb Extensions		Reduce Travel Lane Width (Bump-Up)			Reduced Curb Radius
Harriet Helen Barronette Avenue	High Visibility Crosswalks	Revised Median Islands/ Pedestrian Refuge Areas, Curb Extensions		Reduce # of Travel Lanes			Reduced Curb Radius
Banning Road	High Visibility Crosswalks	Revised Median Islands/ Pedestrian Refuge Areas, Curb Extensions					Reduced Curb Radius

ES	LOCATION TYPE
Streets with parking	Streets with street parking
Exposed	
To install	





# What matters to participating residents?



# Establishing Priority Corridors

Corridor		Safety/ Crashes	Pedestrian Generators	Traffic Calming	Pedestrian Facilities	Bicycle Facilities	Speeds	Volume	Community Comments
		Score							
1	Sheriff Road	●	●	●	○	●	◐	○	●
2	49th Street	◐	●	●	◐	◐	◐	○	●
3	Grant Street	◐	●	○	◐	◐	-	◐	◐
4	Division Avenue	◐	◐	●	○	●	◐	○	◐
5	Hunt Place	◐	○	○	●	◐	○	◐	◐
6	42nd Street	-	◐	●	◐	◐	-	●	○
7	44th Street	◐	○	●	○	◐	◐	◐	○
8	Gault Place	-	●	○	●	○	-	◐	◐
9	Hayes Street	-	●	○	◐	○	-	◐	◐
10	Jay Street	-	○	○	◐	◐	-	◐	-
11	Lee Street	-	○	○	◐	○	○	◐	-
<b>Great Streets/DDOT Project Corridors</b>									
1	Minnesota Avenue	●	●	●	●	●	◐	◐	●
2	E. Capitol Street	●	◐	●	●	●	●	○	●
3	Benning Road	●	●	●	●	●	○	○	○
4	Nannie Helen Burroughs Ave	○	◐	●	●	●	◐	○	○

- No Priority
- Low
- ◐ Medium
- High

Safety/Crashes – total pedestrian crashes relative to corridor length  
 Pedestrian Generators – estimated pedestrian activity from transit stops, schools, churches, retail, etc.  
 Traffic Calming – presence of existing traffic calming (lower priority) or lack of calming features (high priority)  
 Pedestrian Facilities – missing sidewalks and/or infrequent crossing opportunities  
 Bicycle Facilities – level of service for bicycles (based on vehicle speeds, traffic volume, and width of outside travel lane)  
 Speeds – 85th percentile vehicle speeds along the corridor relative to posted speed limit  
 Volume – daily traffic volumes relative to roadway’s functional classification  
 Community Comments – number of comments received at public meetings and on project website

# Example: Sheriff Road

- › Community Concerns (High)
  - *16 (survey and website) comments*
- › Safety/Crashes (Medium)
  - *5 pedestrian crashes 2007-2009*
- › Pedestrian Generators (High)
  - *1,835 estimated pedestrians per day*
- › Traffic Speeds (Med)
  - *6 mph over posted speed (85%ile)*
- › Traffic Volumes (Med)
  - *Within minor arterial threshold; limited cut-through traffic*
- › Bicycle Facilities (High)
  - *High speeds with limited outside lane width*
- › Traffic Calming (High)
  - *No existing traffic calming*





# Establishing Priority Intersections

Intersection		Safety/ Crashes	Pedestrian Generators	Geometry	Pedestrian Facilities	Operations	Community Comments
		Score					
1	Benning Rd/E. Capitol St/Central Ave	●	●	●	○	●	●
2	Benning Rd/39th St (Benning Branch Library)	-	●	○	●	-	●
3	Minnesota Ave/48th St (Deanwood Community Center/Metro)	-	●	◐	◐	-	●
4	E. Capitol St/Central Ave/50th St	◐	●	◐	◐	-	◐
5	Eastern Ave/Minnesota Ave	●	●	◐	○	-	◐
6	Eastern Ave/Sheriff Rd/Division Ave	◐	◐	◐	○	○	◐
7	Sheriff Rd/45th St/45th Pl	○	◐	○	◐	○	◐
8	49th St/Quarles St (Deanwood Community Center)	-	●	○	●	-	○
9	Minnesota Ave/Quarles St (Deanwood Community Center)	-	●	◐	○	-	○
10	E. Capitol St/Southern Ave/61st St	●	○	●	○	-	○
11	Eastern Ave/61st St/Eads St	-	○	◐	●	-	○
<b>Great Streets/DDOT Project Intersections</b>							
1	Benning Rd/Minnesota Ave	●	●	●	○	◐	●
2	Nannie Helen Burroughs Ave/Minnesota Ave	●	◐	◐	●	◐	◐
3	Minnesota Ave/Grant St	○	●	◐	◐	◐	◐
4	Minnesota Ave/Blaine St	●	●	◐	◐	-	●
5	Nannie Helen Burroughs Ave/44th St	-	◐	◐	○	◐	◐
6	Nannie Helen Burroughs Ave/50th St	◐	◐	○	●	-	○
7	Nannie Helen Burroughs Ave/48th St	◐	○	◐	○	-	○
8	E. Capitol St/Minnesota Ave	○	◐	-	-	-	◐

- No Priority
- Low
- ◐ Medium
- High

Safety/Crashes – total pedestrian crashes at intersection  
 Pedestrian Generators – estimated pedestrian activity from transit stops, schools, churches, retail, etc.  
 Geometry – long pedestrian crossing distances at intersection  
 Pedestrian Facilities – missing crosswalks on one or more legs of intersection  
 Operations – inadequate pedestrian crossing time, long vehicle queues, or congested traffic conditions  
 Community Comments – number of comments received at public meetings and on project website

# Example – E. Capitol St/Benning Rd

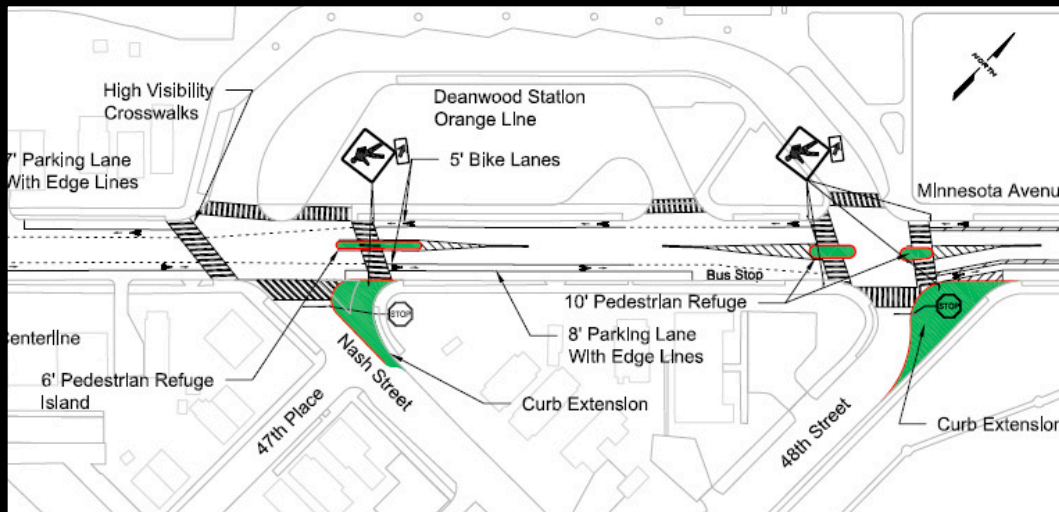
- › Community Concerns (High)
  - *11 survey and website comments*
- › Safety/Crashes (High)
  - *62 total crashes from 2007-2009*
- › Pedestrian Generators (High)
  - *2,358 estimated pedestrians per day*
- › Intersection Geometry (High)
  - *Average of 75 feet to cross the street*
- › Pedestrian Facilities (Low)
  - *Marked crossings on each leg with pedestrian refuge*
- › Intersection Operations (High)
  - *Capacity and queuing issues; limited pedestrian crossing time*





# Phase 4: Discussion

- › Test and refine solutions that are
  - *buildable*
  - *fundable*
  - *consent-driven.*



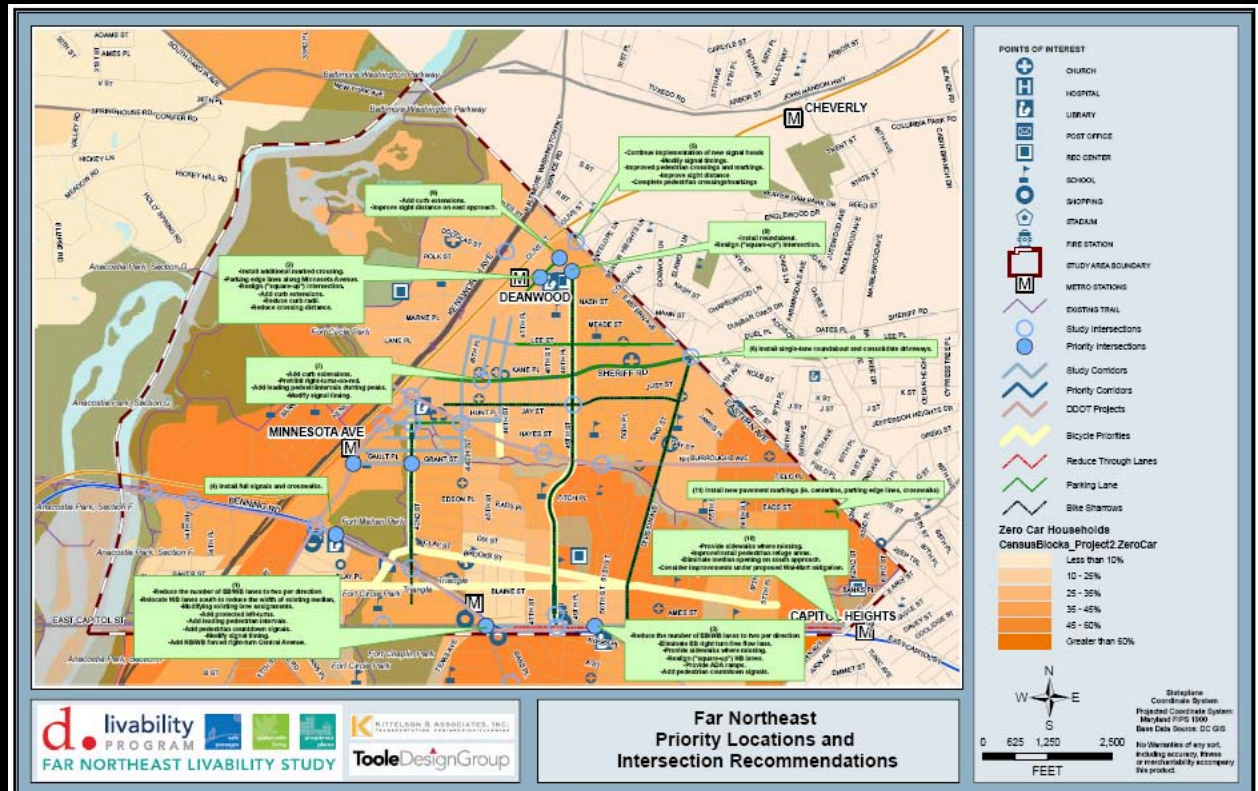
# Phase 5: Documentation

## Blueprint for action

- *Projects*
- *Performance measures*

## For both sides of the partnership

- *Agency leads*
- *Livability Community Outreach Advisor Partners*





# Postscript



# Thank You

Yolanda Takesian

[ytakesian@kittelson.com](mailto:ytakesian@kittelson.com)

Kittelson & Associates, Inc.

Samuel Jordan

[samuel.jordan@msn.com](mailto:samuel.jordan@msn.com)

HCN Communities

Gabe Onyeador

[gabe.onyeador@dc.gov](mailto:gabe.onyeador@dc.gov)

DDOT Project Manager

<http://www.farnortheastlivability.com/>



KITTELSON & ASSOCIATES, INC.  
TRANSPORTATION ENGINEERING/PLANNING



# Department of Transportation The Evolution of Planning through the Decades



1916 – US Bureau of Public Roads

1956 – Federal-Aid Highway Act

1962 – Federal Highway Act Amendments

- *Mandate for Long Range Transportation Planning: 3 C's of Planning: Cooperative, Continuing and Comprehensive*

1964 – Urban Mass Transportation Act & Housing Act

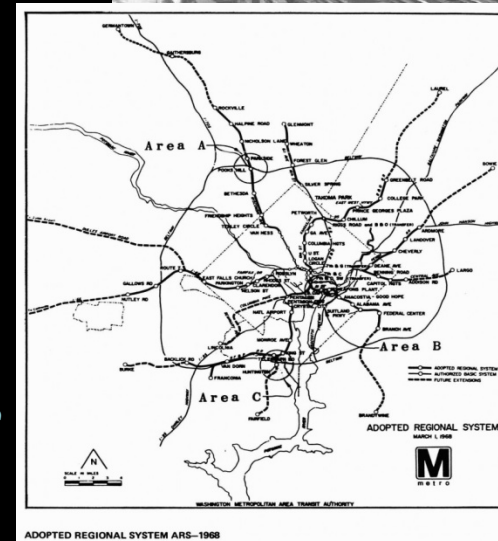
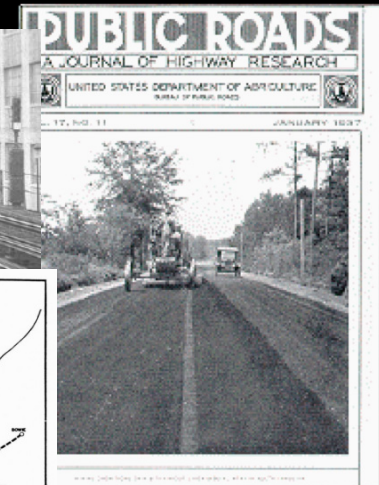
1966 – US Department of Transportation

1970 – Urban Mass Transportation Assistance Act

- *Requirement for public hearings on the economic, social and environmental impacts of proposed projects*

1973 – Federal –Aid Highway Act

- *Required MPO's in all urban areas*



IS THE FIRST PROJECT  
THE UNITED STATES  
H ACTUAL CONSTRUCTION WAS STARTED  
UNDER PROVISIONS OF THE NEW  
RAL AID HIGHWAY ACT OF 1956  
SOURI STATE HIGHWAY COMMISSION  
CAMERON, JOYCE & COMPANY  
CONTRACTOR



# Department of Transportation The Evolution of Planning through the Decades



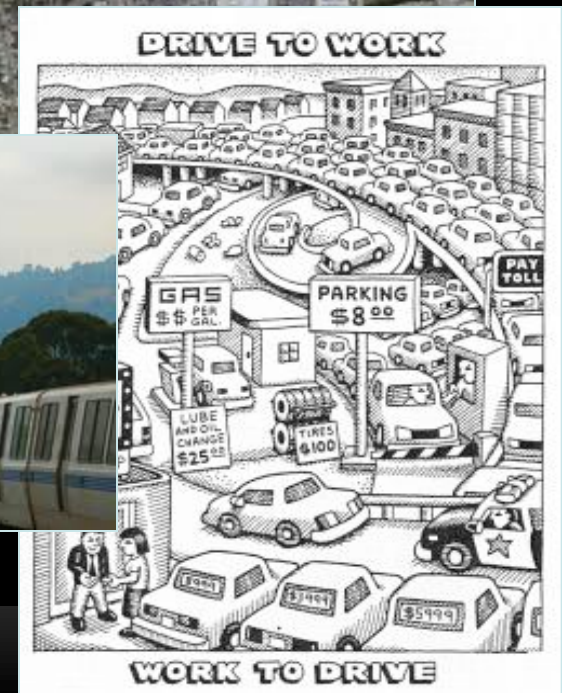
## *1970's – New Rail Systems*

- *Washington, DC*
- *Atlanta, Georgia*
- *Cleveland, Ohio*
- *San Francisco, California*



## *1980's - Suburban Economy*

- *Traffic*
- *Congestion*
- *Shopping Malls*
- *Suburban Job Growth*
- *Sprawl*





# Department of Transportation 20 Years of Livability Initiatives



## 1991 – Federal Transit Administration (FTA)



## 1991 – Federal Surface Transportation Efficiency Act (ISTEA)

- Surface Transportation Program (STP)
- Congestion Mitigation and Air Quality (CMAQ)
- Federal Highway Administration (FHWA) Transportation Enhancements (TE) Program
- Federal Transit Administration's (FTA) Livable Communities Initiative

## 1998 – TEA-21



## 2005 – SAFETEA-LU



# Department of Transportation 20 Years of Livability Initiatives



## 2009 – American Recovery & Reinvestment Act (ARRA)

### ➤ Transit Investment Generating Economic Recovery (TIGER I)

- Over \$48 Billion in Transportation Recovery Act Funds
  - ✓ \$27.5 billion for highway and bridge construction projects;
  - ✓ \$8 billion for intercity passenger rail projects and rail congestion grants;
  - ✓ \$6.9 billion for new equipment for public transit projects;
  - ✓ \$1.5 billion for surface transportation discretionary grant projects;
  - ✓ \$750 million for new public rail and fixed guideway transportation systems.



## 2010 – TIGER II

- *\$600 million surface transportation discretionary grant projects*
  - \$35 million for Planning & Preparation

## 2011 – TIGER III

- *\$526.955 million surface transportation discretionary grant projects*
  - National Infrastructure Investments



# Department of Transportation 20 Years of Livability Initiatives



## 2011 – Livability Expansion Initiative under the Sustainable Communities Partnership

- *\$175 million from DOT*



## 2010 – FTA Sustainability Initiative

- *\$81 million Clean Fuels Grant Program*
- *\$75 million Transit Investment in Greenhouse Gas and Energy Reduction (TIGGER) III Program*

## 2011 – FTA Sustainability Initiative

- *\$51.5 million Clean Fuels Grant Program*
- *\$49.9 million Transit Investment in Greenhouse Gas and Energy Reduction (TIGGER) III Program*
- *\$750 million State of Good Repair Initiative*

# What we'll cover

- › The value of meaningful public engagement in transportation
- › Its history: the role of NEPA
- › Current trends & techniques
- › Livability Planning Approach
- › DC's Far Northeast Livability Study
  - *Organizing outreach & communications*
  - *Identifying concerns, issues & opportunities*
  - *Designing solutions & selecting priorities*





# Federal Funding Is Linked to Meeting NEPA Requirements

- › FTA cannot release funding for final design and construction until the environmental review process under NEPA is complete
- › Prior to completion of NEPA environmental review, no federal action is permitted that would:
  - *Have an adverse environmental impact*
  - *Limit choice of reasonable alternatives*
- › NEPA process concludes by one of three environmental findings:
  - *Categorical Exclusion (CE) or*
  - *Record of Decision (ROD) on an EIS or*
  - *Finding of No Significant Impact (FONSI) on an EA*
- › Project sponsors seeking federal funding should coordinate with FTA early

