

New Jersey Highway Access Code Reevaluation Study

Access Management Conference

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Acknowledgements

- NJDOT
 - Jim Lewis
 - Neil Longfield
 - Yvette McKoy
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 - Margaret Quinn



Overview of Presentation

- Brief Background of Study
- Questions on How to Address “Main Street” in the Access Code



Purposes of Study

- Assess relationship between Access Code and State Development & Redevelopment Plan (SDRP)
- Recommend modifications to the Access Code to better align it with the SDRP

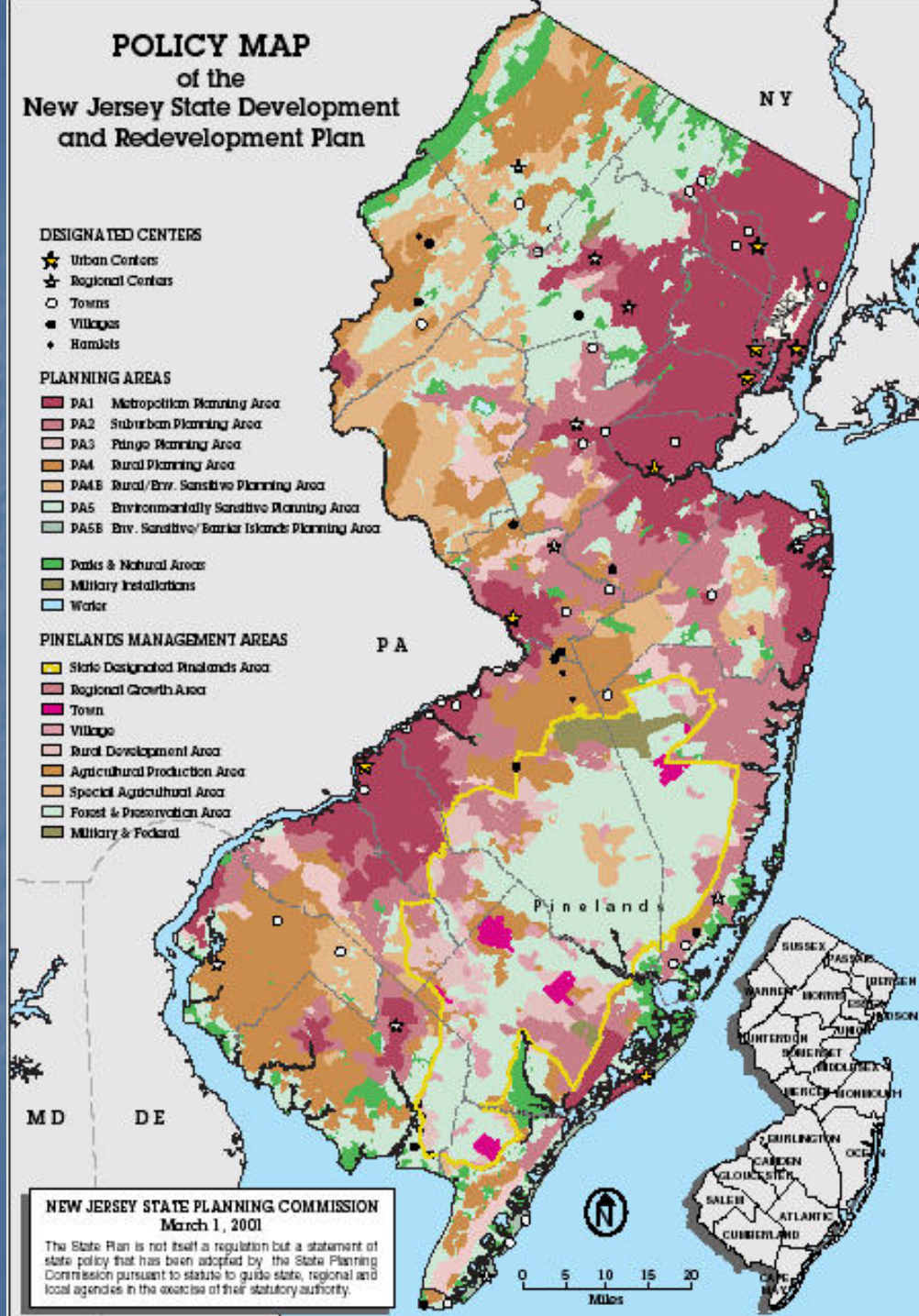


Key Elements of the Access Code

- Permit Application & Approval Process
- Access Classification System (Appendix "A")
- Access Levels (Appendix "B")
- Driveway / Intersection Spacing
- Access Management Plans
- Traffic Impact Study Procedures
- Provisions for Non-conforming Lots



What is the State Development & Redevelopment Plan (SDRP)?



SDRP Planning Areas

- Metropolitan (PA1)
- Suburban (PA2)
- Fringe (PA3)
- Rural (PA4, PA4B)
- Environmentally Sensitive (PA5, PA5B)



Summary of Products

- Identify how the Access Code can reflect multimodal and main street considerations
- Recommend how the classification system can be modified to reflect the SDRP
- Identify how to improve the Access Management Plan process



Summary of Products (cont'd.)

- Identify how to better align municipal land-use control procedures with the Code to foster smart growth outcomes
- Produce recommendations for changes to:
 - Access Code
 - State Highway Access Management Act
 - Municipal Land Use Law



Questions on How to Address “Main Street” in the Access Code



Appendix "A"
Access Classification Matrix
Based on Desirable Typical Sections

URBAN CHARACTERISTICS												
Access Class	High Speed >=45 mph						Low Speed <45 mph					
	Divided		Undivided Multi-Lane		2-lane		Divided		Undivided Multi-Lane		2-lane	
	Access Level	Cell	Access Level	Cell	Access Level	Cell	Access Level	Cell	Access Level	Cell	Access Level	Cell
Accessible Principal Arterials	3	(1)	4	(2)	4	(3)	3	(4)	4	(5)	5	(6)
Minor Arterials	3/4	(7)	4	(8)	5	(9)	3/4	(10)	4	(11)	5	(12)
Collector Roads	4	(13)	5	(14)	6	(15)	4	(16)	5	(17)	6	(18)
Local Roads	4	(19)	6	(20)	6	(21)	4	(22)	6	(23)	6	(24)

RURAL CHARACTERISTICS												
Access Class	High Speed >=50 mph						Low Speed <50 mph					
	Divided		Undivided Multi-Lane		2-lane		Divided		Undivided Multi-Lane		2-lane	
	Access Level	Cell	Access Level	Cell	Access Level	Cell	Access Level	Cell	Access Level	Cell	Access Level	Cell
Accessible Principal Arterials	2	(25)	4	(26)	4	(27)	3	(28)	4	(29)	5	(30)
Minor Arterials	2	(31)	4	(32)	5	(33)	3/4	(34)	4	(35)	5	(36)
Major Collectors	3/4	(37)	5	(38)	6	(39)	4	(40)	5	(41)	6	(42)
Minor Collectors	4	(43)	5	(44)	6	(45)	4	(46)	5	(47)	6	(48)
Local Roads	4	(49)	6	(50)	6	(51)	4	(52)	6	(53)	6	(54)

Access Levels

- 1 - Fully Controlled Access
- 2 – Access along Street or Interchange Only
- 3 - Right-turn Access with Provision for Left-turn Access via Jughandle
- 4 - Driveway with Provision for Left-turn Access via Left-turn Lane
- 5 - Driveway with Provision for Left-turn Access (Limited by Spacing and Safety Considerations)
- 6 - Driveway Access Limited by Edge Clearance and Safety Considerations



Benefits of Main Street Designation

- Balances mobility, property access, & needs of non-vehicular modes
- Achieves mutual understanding as to the form, function and purpose of the highway
- Provides for a different level of allowable property access
- Provides for greater flexibility in design



How Do You Identify a Main Street?



Basis for Main Street Scoring Formula

- Developed specifically for New Jersey roadways by New Jersey professionals
- Based on visual preference surveys



Scoring Formula for New Jersey's Main Streets

prepared for:

New Jersey Department of Transportation

prepared by:

Reid Ewing, Michael King, and Sophie Hartshorn

Alan M. Voorhees Transportation Center

Edward J. Bloustein School of Planning and Public Policy

Rutgers, The State University of New Jersey

March 2003

Alan M. Voorhees Transportation Center

THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

Main Street Scoring Formula

- Calculates “Main Street-ness” based on:
 - Proportion of buildings that house commercial uses
 - Proportion of street frontage occupied by:
 - “Dead” space (vacant lots, parking lots, blank walls, driveways)
 - Cars parked on-street
 - Tree canopy
 - Number of travel lanes
 - Average sidewalk width
 - Presence of curb extensions



Other Criteria Considered by VTC

- Proportion of visible buildings that are historic
- Average travel lane width
- Average shoulder width
- Average median width
- Total curb-to-curb width
- Posted speed limit
- Marked crosswalk visible
- Textured pavement visible
- Uniform building heights



Other Criteria Considered by VTC, cont'd

- Pedestrian-scaled street lights
- Number of moving vehicles visible
- Average setback from curb to visible buildings
- Average building height
- Ratio of building height to street width plus building setbacks
- Number of pedestrians visible
- Underground utilities
- Condition of street pavement



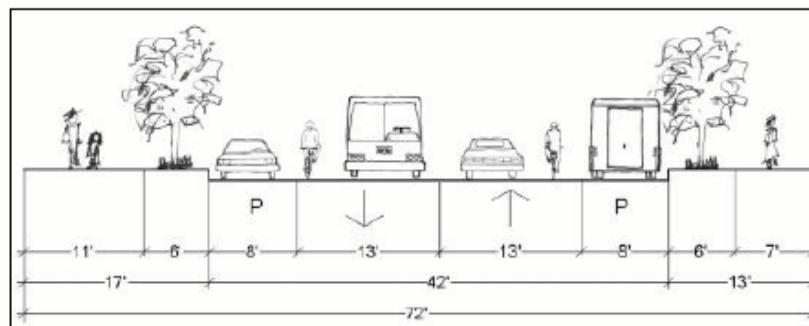
NJ-124 (South Street) in Morristown

Morristown

South Street

South Park Place-Elm Street

Mile post 0.0-0.4



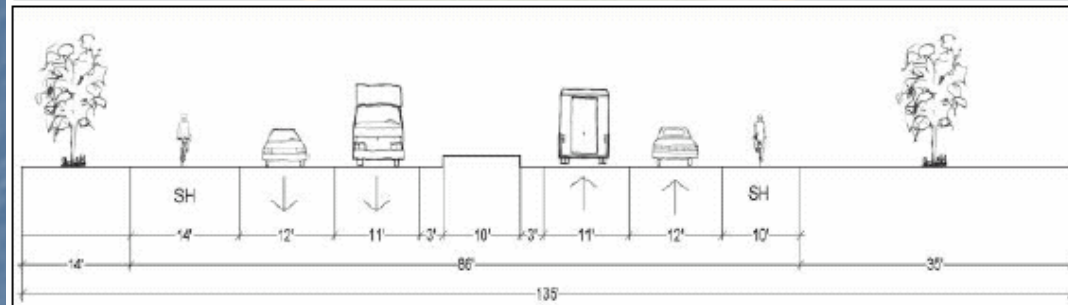
Present Suitability as Main Street	5.29
Future Potential for Main Street	6.35
Functional Class	Urban Principal Arterial
Volume	17,492 (2002)
Volume/Lane	8746
Posted Speed Limit	30 mph
Peak Hour Average Speeds	8-21 mph
State Plan Center	No
Land Use	Commercial
Truck Route	In State
Designated Bus Stops	Yes
Access Level	At Street or Interchange
Desirable Typical Section Peak	102', 4 Lanes, Parking
Existing Main Street Score	1.94

NJ-70 in Brick

Brick

Route 70

Brick Blvd. -Chambers Bridge Road
Mile post 54.4 -54.6



Present Suitability as Main Street	2.05
Future Potential for Main Street	2.34
Functional Class	Urban Principal Arterial
Volume	29,923 (2002)
Volume/Lane	7498
Posted Speed Limit	50 mph
Peak Hour Average Speeds	28-36 mph
State Plan Center	No
Land Use	Commercial
Truck Route	No 102' / 53"
Designated Bus Stops	No
Access Level	Right Turn and Jughandle
Desirable Typical Section Peak	114', 4 Lanes, Shoulder, Divide
Existing Main Street Score	-1.42

What Would Be The Impact of Main Street Designation?



Additional Criteria Considered

- Posted speed
- Supporting street network
- Operating speed
- Functional classification
- Percentage of truck traffic
- Average Annual Daily Traffic
- National Highway System
- Peak hour traffic volume
- Pedestrian volumes
- Availability of public transportation
- Through versus local traffic



Posted Speed Criterion

- Speed = 25 to 35 mph
 - Eligible for consideration of Main Street designation
- Speed \geq 40 mph
 - Not eligible for Main Street designation
- Approach is consistent with NJDOT
Traffic Calming Resource Document
 - Traffic calming allowed only where speed \leq 35 mph



State Highway Mileage By Posted Speed

25 mph roadways =	17.5 miles
30 mph roadways =	66.7 miles
<u>35 mph roadways =</u>	<u>179.6 miles</u>
TOTAL =	263.8 miles

14% of total State highway mileage



Potential Elements in Main Street Designation Process



Main Street Mobility Assessment (MSMA)

- Assesses the implications of designating a State highway segment as a Main Street
- Could serve as the basis for a Main Street “Management Plan”
- “Management Plan” could be adopted by the municipality as an additional element or analysis of the Comprehensive Master Plan



Main Street Mobility Assessment, cont'd

- Requires participation from:
 - Affected Main Street businesses
 - Local developers
 - Neighborhood groups
 - Adjacent municipalities
 - Host county and MPO (where applicable)
 - State (NJDOT and Office of Smart Growth)



Main Street MOU

- Required for all Main Streets
- Memorializes agreements and commitments made by NJDOT and municipality
- Defines and protects the character of the roadway as a Main Street
- Identifies limits of Main Street area and required posted speeds
- Requires monitoring and enforcement to ensure preservation of Main Street qualities



Questions to Answer

- How do you identify a Main Street?
- How do you confirm that a Main Street designation would not have a significant adverse effect?
- What special considerations would apply?
- What roles should NJDOT and other agencies play in the designation process?
- How should the process be structured?

Questions



What is Smart Growth?

- Well-planned and well-managed growth
- Adds new homes & jobs, but...
- ...preserves open space, farmland, and environmentally sensitive lands, and...
- ...promotes redevelopment and urban revitalization
- Supports livable neighborhoods
- Takes advantage of multimodal forms of transportation
- Enhances the quality of life for residents
- The SDRP is New Jersey's plan for smart growth



Main Street Designation Process (initiated by local officials)

Local officials initiate Main Street designation based on Existing or Future Conditions

Local officials to initiate Initial Plan Endorsement Process¹

Local officials to develop a Main Street Mobility Assessment in partnership with NJDOT that establishes a Main Street score of ≥ 1.0

Concurrence between NJDOT and Local officials regarding completed Main Street Mobility Assessment and Initial Plan Endorsement Process?¹

Yes

Local officials and NJDOT prepare MOU as part of PIA²

Local officials adopt MOU?

No

No Main Street designation
(use standard access classification system; new Appendices “A” and “B”)

Yes

NJDOT proposes Main Street designation in rulemaking

Main Street segment included in Appendix “B” based on Existing or Future Conditions

No

Is there an AMP?

Yes

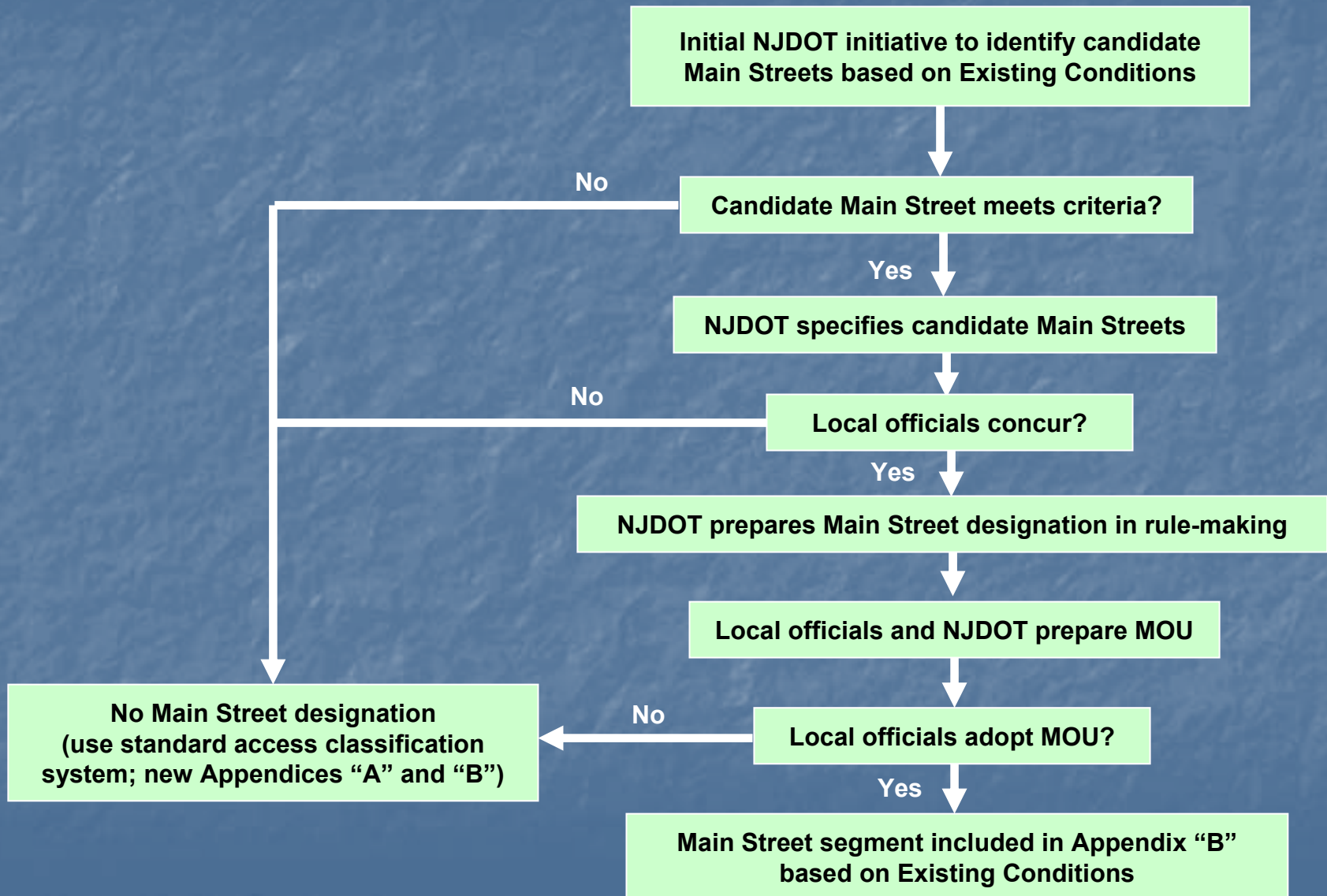
Follow AMP provisions
(TBD)

AMP = Access Management Plan
MOU = Memorandum of Understanding

1 – This process may be simplified if locality is part of an existing Designated Center or has received Plan Endorsement.

2 – PIA = Planning and Implementation Agreement

Main Street Designation Process (process for initial rulemaking by NJDOT)



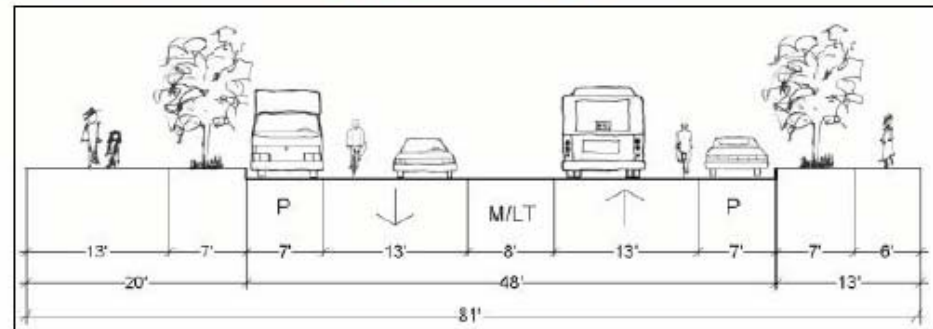
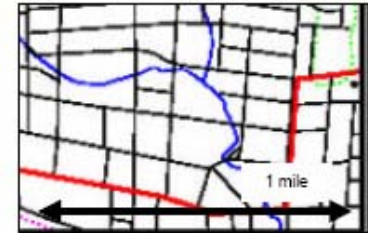
NJ-28 (W. Main Street) in Somerville

Somerville

W. Main Street

Doughty Ave. – South Bridge Street

Mile post 3.0 – 3.4



Present Suitability as Main Street

Future Potential for Main Street

Functional Class

Volume

Volume/Lane

Posted Speed Limit

Peak Hour Average Speeds

State Plan Center

Land Use

Truck Route

Designated Bus Stops

Access Level

Desirable Typical Section Peak

Existing Main Street Score

5.31

6.36

Urban Principal Arterial

18,122 (2002)

9061

30 mph

6-35 mph

Regional Center

Commercial, Train Station

In State

Yes

Driveway with Provision for Left-turn I

92', 2 Lanes, Shoulder

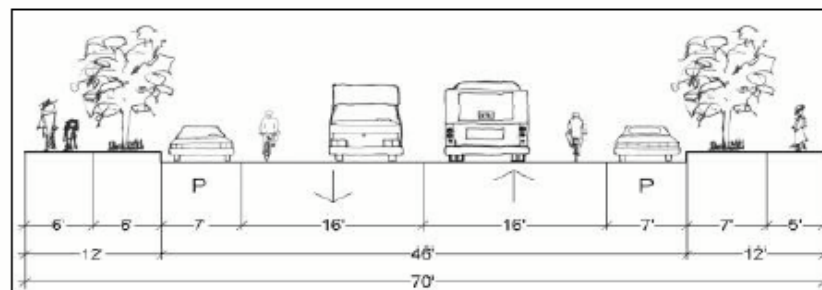
1.76



NJ-27 (Nassau Street) in Princeton

Princeton

Nassau Street
Bayard Lane – Linden Lane
Mile post 0.0 – 0.9



Present Suitability as Main Street	5.21
Future Potential for Main Street	6.37
Functional Class	Urban Principal Arterial
Volume	17,290 (2002)
Volume/Lane	8645
Posted Speed Limit	25mph
Peak Hour Average Speeds	1-35 mph
State Plan Center	Regional Center
Land Use	Residential, Commercial, University
Truck Route	In State
Designated Bus Stops	Yes
Access Level	Driveway with Provision for Left-turn Lane
Desirable Typical Section Peak	Existing
Notes:	Striped left turn lanes, striped median periodically
Existing Main Street Score	1.63



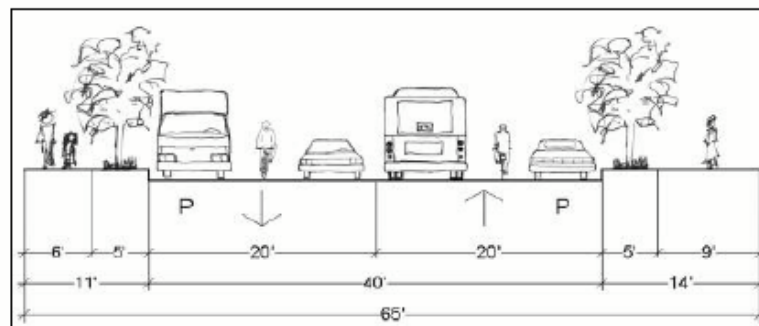
NJ-124 (Main Street) in Madison

Madison

Main Street

Central Ave.-Rosedale Ave.

Mile post 4.6 – 5.1



Present Suitability as Main Street

Future Potential for Main Street

Functional Class

Volume

Volume/Lane

Posted Speed Limit

Peak Hour Average Speeds

State Plan Center

Land Use

Truck Route

Designated Bus Stops

Access Level

Desirable Typical Section Peak

Existing Main Street Score

5.31

6.44

Urban Principal Arterial

17,279 (2002)

8640

30 mph

3-35 mph

No

Commercial, Train Station

In State

Yes

Driveway with Provision for Left-turn Lane

78', 2 Lanes, Shoulder

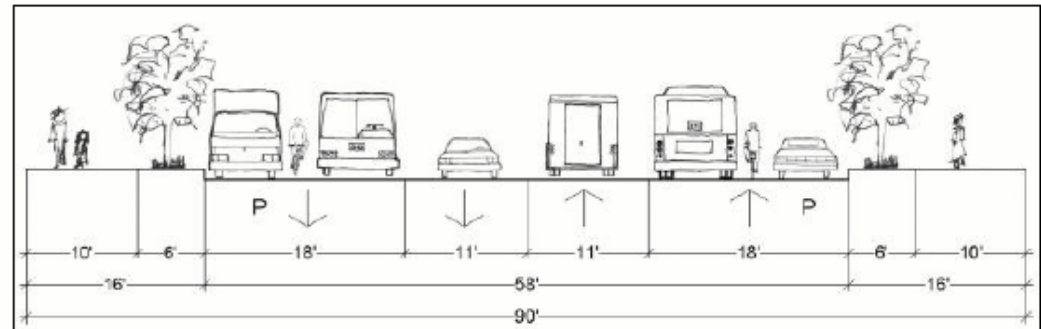
1.53

NJ-45 (Broad Street) in Woodbury

Woodbury

Broad Street

Penn Street – Delaware Street
Mile post 25.5 – 25.9



Present Suitability as Main Street	4.71
Future Potential for Main Street	6.13
Functional Class	Urban Minor Arterial
Volume	38,292 (2002)
Volume/Lane	9573
Posted Speed Limit	25 mph
Peak Hour Average Speeds	4-20 mph
State Plan Center	No
Land Use	Commercial, Institutional
Truck Route	No 102" / 52'
Designated Bus Stops	Yes
Access Level	None
Desirable Typical Section Peak	78', 4 Lanes, No Shoulder
Existing Main Street Score	1.34

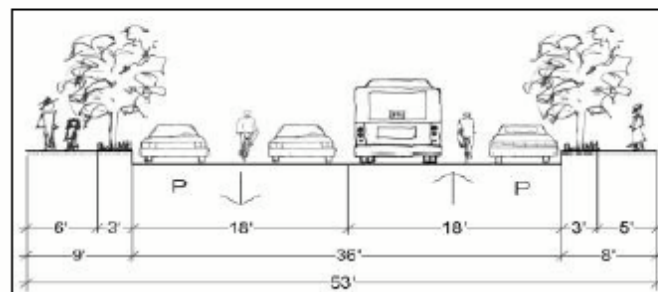
NJ-24 (Main Street) in Chester

Chester

Main Street

Route 206 – Hillside Road

Mile post 30.3 – 30.6



Present Suitability as Main Street	4.57
Future Potential for Main Street	6.00
Functional Class	Rural Minor Arterial
Volume	10,794 (2002)
Volume/Lane	5397
Posted Speed Limit	30 mph
Peak Hour Average Speeds	N/A
State Plan Center	No
Land Use	Residential, Commercial
Truck Route	In State
Designated Bus Stops	Yes
Access Level	None
Desirable Typical Section Peak	None
Existing Main Street Score	1.25

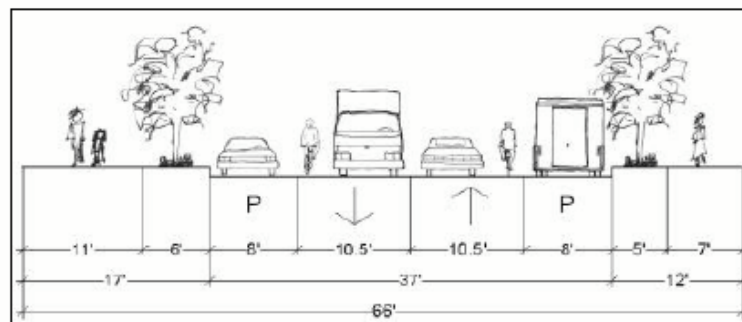
US-46 (Main Street) in Hackettstown

Hackettstown

Main Street

High Street – Willow Grove Street

Mile post 21.3 – 21.7



Present Suitability as Main Street	5.26
Future Potential for Main Street	6.28
Functional Class	Urban Minor Arterial
Volume	18,142 (2002)
Volume/Lane	9071
Posted Speed Limit	30 mph
Peak Hour Average Speeds	8-33 mph
State Plan Center	No
Land Use	Commercial, Park
Truck Route	In State
Designated Bus Stops	No
Access Level	Driveway with Provision for Left-turn Lane
Desirable Typical Section Peak	78', 4 Lanes, No Shoulder
Existing Main Street Score	1.18

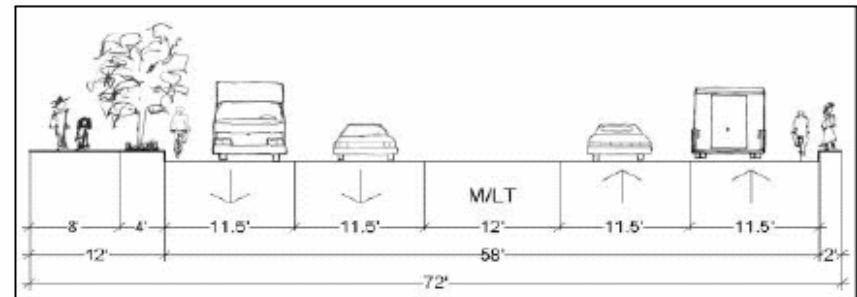
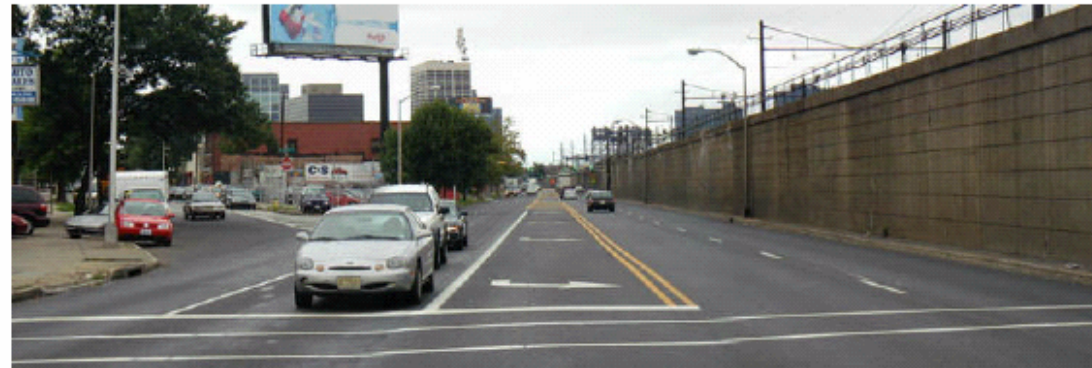
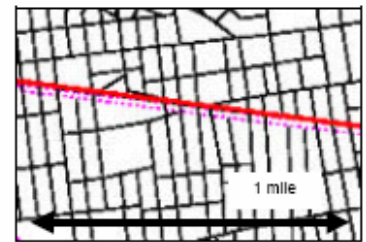
NJ-21 (McCarte Highway) in Newark

Newark

McCarte Highway

Pointer Street – Lafayette Street

Mile post 0.9 – 2.0



Present Suitability as Main Street	1.86
Future Potential for Main Street	2.21
Functional Class	Urban Principal Arterial
Volume	62,022 (2002)
Volume/Lane	15,505
Posted Speed Limit	35 mph
Peak Hour Average Speeds	1-21 mph
State Plan Center	Urban Center
Land Use	Industrial, Commercial
Truck Route	In State
Designated Bus Stops	No
Access Level	Driveway with Provision for Left-turn Lane
Desirable Typical Section Peak	124', 6 Lanes, Shoulder, Divided
Notes:	Elevated train tracks at right
Existing Main Street Score	-1.10

What is the New Jersey Access Code?

- Regulatory document to **improve safety** and **preserve capacity** of the State highway system **by regulating access**
- Developed to implement the *State Highway Access Management Act* of 1989

