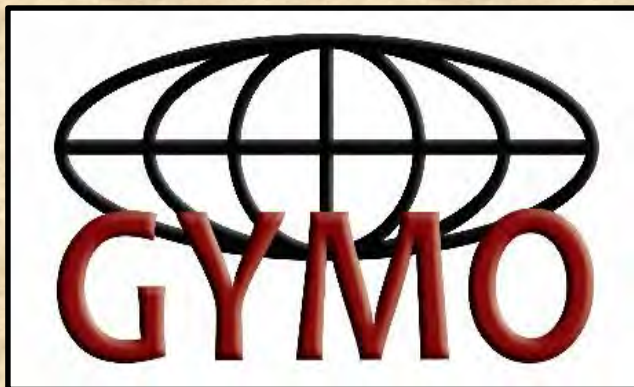




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Overview

- **Highway Function**
- **Planning Trends**
- **Potential Impacts**
- **Planning Approach**



The Comprehensive Plan

- NYSDOS Defined
- Natural Resources
- Historic & Cultural Resources
- Parks, Recreation, Open Space
- **Transportation**
- Infrastructure
- Economic Development
- Community Facilities
- **Land Use**



Transportation & Land Use

.....but **Guess What?**

They are all Economic Development



Transportation & Land Use



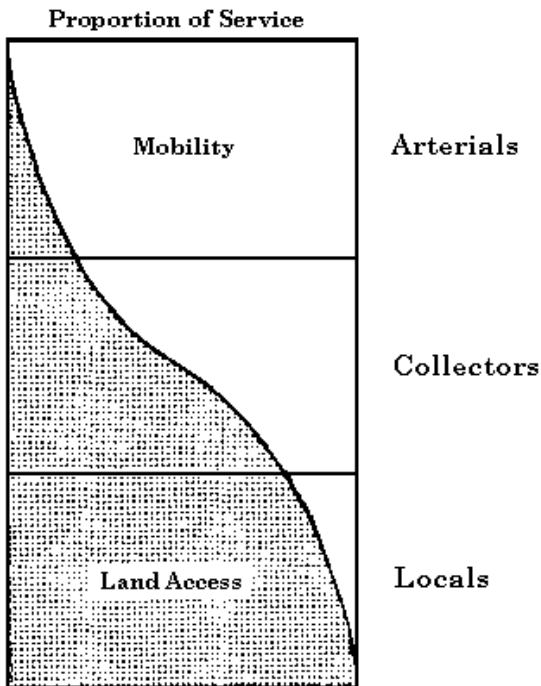
Google Earth

Function



Highway Function

Relationship of functionally Classified Systems in Serving Traffic Mobility and Land Access



- To carry traffic in a safe and efficient manner.
- To provide access to adjacent land.
- To provide access from adjacent land to a global transportation network.

Highway Function

- Highway function is broken down into a classification system according to the number of vehicles that it is designed to carry (capacity).
- Highway function can be compromised as development occurs adjacent to the highway right of way.

Functional Classification System

Local Streets



- Access to abutting property.
- Intra-neighborhood traffic.
- Travel within a neighborhood.
- Pedestrian friendly
- Moving traffic is a secondary function.
- Should NOT carry through traffic.

Function



Functional Classification System

Collector Streets



Thematic Map Created
From Database

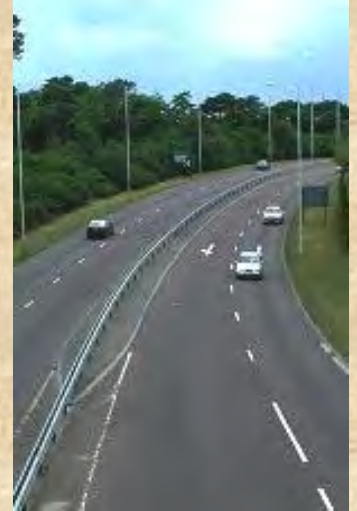
- Collects traffic from local streets.
- Conducts local traffic to arterials.
- Provides inter-neighborhood traffic.
- Provide bicycle and pedestrian links.
- Designated crossings.
- Access to adjacent land is a secondary function

Function



Functional Classification System

Arterial Highway



- Primary function is moving traffic.
- Moves higher volumes of traffic at higher speeds.
- Provides inter-community traffic.
- Pedestrian links should be separate.
- Access to adjacent land should be minimized

Function



Functional Classification System

Limited Access / Freeway

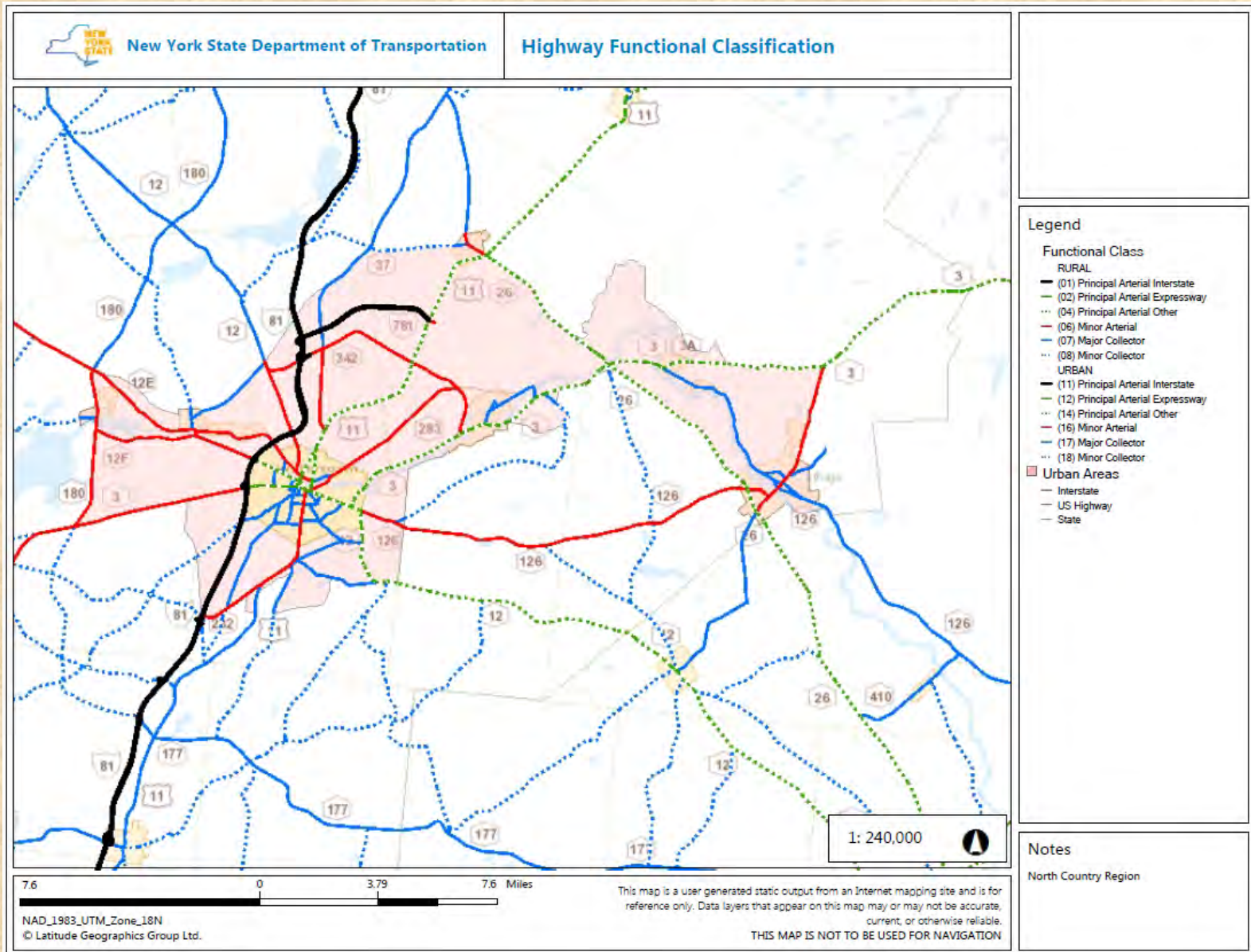


Source: N.Y.S.D.O.T.

Function



Context within the Region

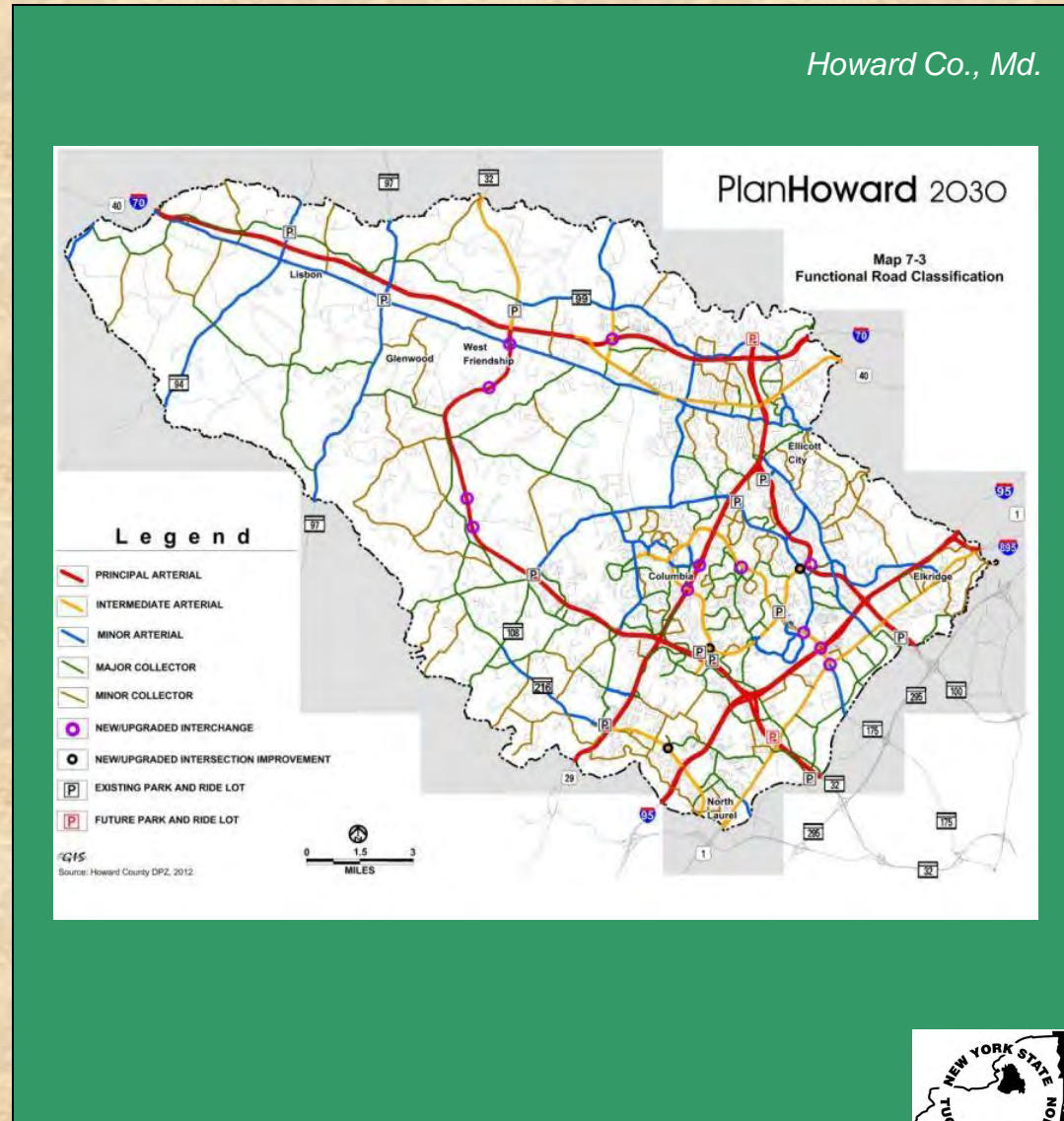


Context within the Region

Look at the Big Picture

Your highway system is part of a larger highway system that includes all modes of transportation ranging from pedestrian routes to railroad and bus transportation

Howard Co., Md.



ALWAYS, ALWAYS, ALWAYS

- **Encourage Cross Access**
- **Encourage Reverse Access**
- **Shared Access**

Role of Involved Agencies

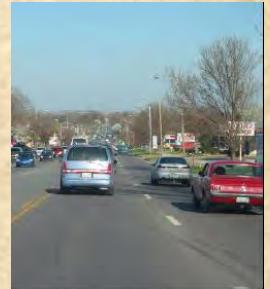
- **New York State Department of Transportation**
- **County Department of Transportation**
- **County Planning Board/Department**
- **Town and Village Planning Boards**

Planning Trends



- Linking Transportation with Land Use

- Highway Corridor Management



- Highway Access Management



- Multi-Modal Transportation



- Bicycle & Pedestrian Connections



- Energy Conservation



Columbus, OH



Trends





Trends



Town Center (Urban/Suburban)

- Movie Theater
- Out Parcel Development
- New Apartments
- Hotel Facility
- Regional Attractions

Local Impacts



Identifying Potential Impacts

- **Spin-off Development.**
- **Unplanned Growth.**
- **Comprehensive Planning.**

“Spin – Off” Development

- Fast Food
- Service Stations (“Dive Through”)
- Convenience Services
- Support Services



Local Impacts



Unplanned Growth (Rural)



Local Impacts



Unplanned Growth



Local Impacts



It's the Economy

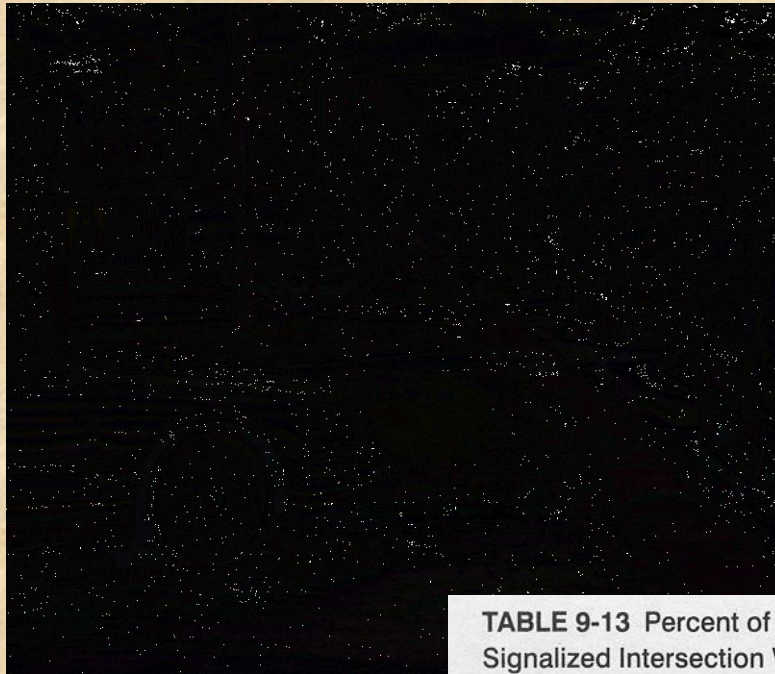


TABLE 9-13 Percent of Cycles During Which Driveway in Close Proximity to a Signalized Intersection Will Be Blocked (3)

Flow in Lane Adjacent to Driveway (vph)	Duration of Red Phase (s)	Corner Clearance ^a (ft)				
		25	50	75	100	125
200	15	20	5	1		
	25	40	16	5		
	35	58	31	13	5	2
	45	71	46	24	11	4
400	15	50	23	9	3	1
	25	77	53	30	15	6
	35	90	75	55	35	20
	45	96	88	74	56	38

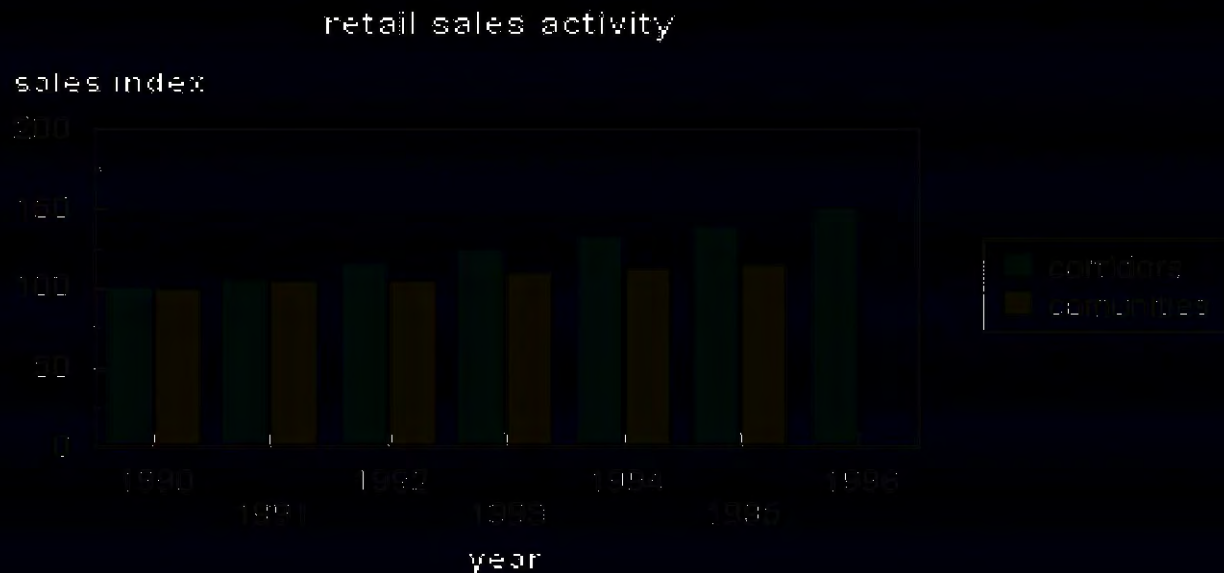
NOTE: vph= vehicles per hour.

^a Assumes average length, including space between stopped vehicles, is 25 ft.



It's the Economy

Iowa Access Management Projects



Local Impacts



It's the Economy

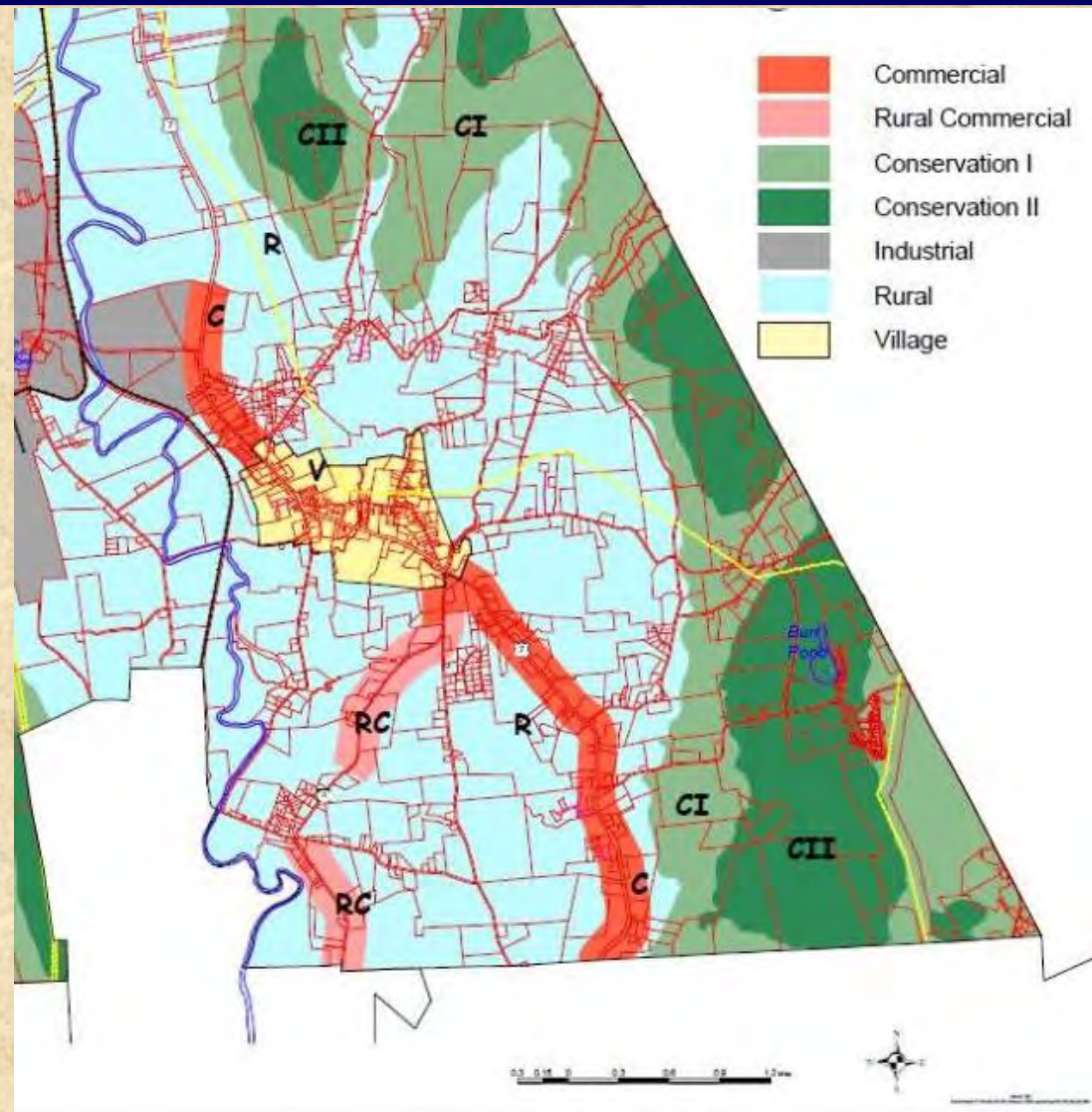


Business Impacts -- Capacity and safety problems can reach the point where even anchor businesses will relocate. The problem is particularly severe in areas where markets have grown to sufficiently to attract competition.

Local Impacts



If your Zoning Looks Like This.....



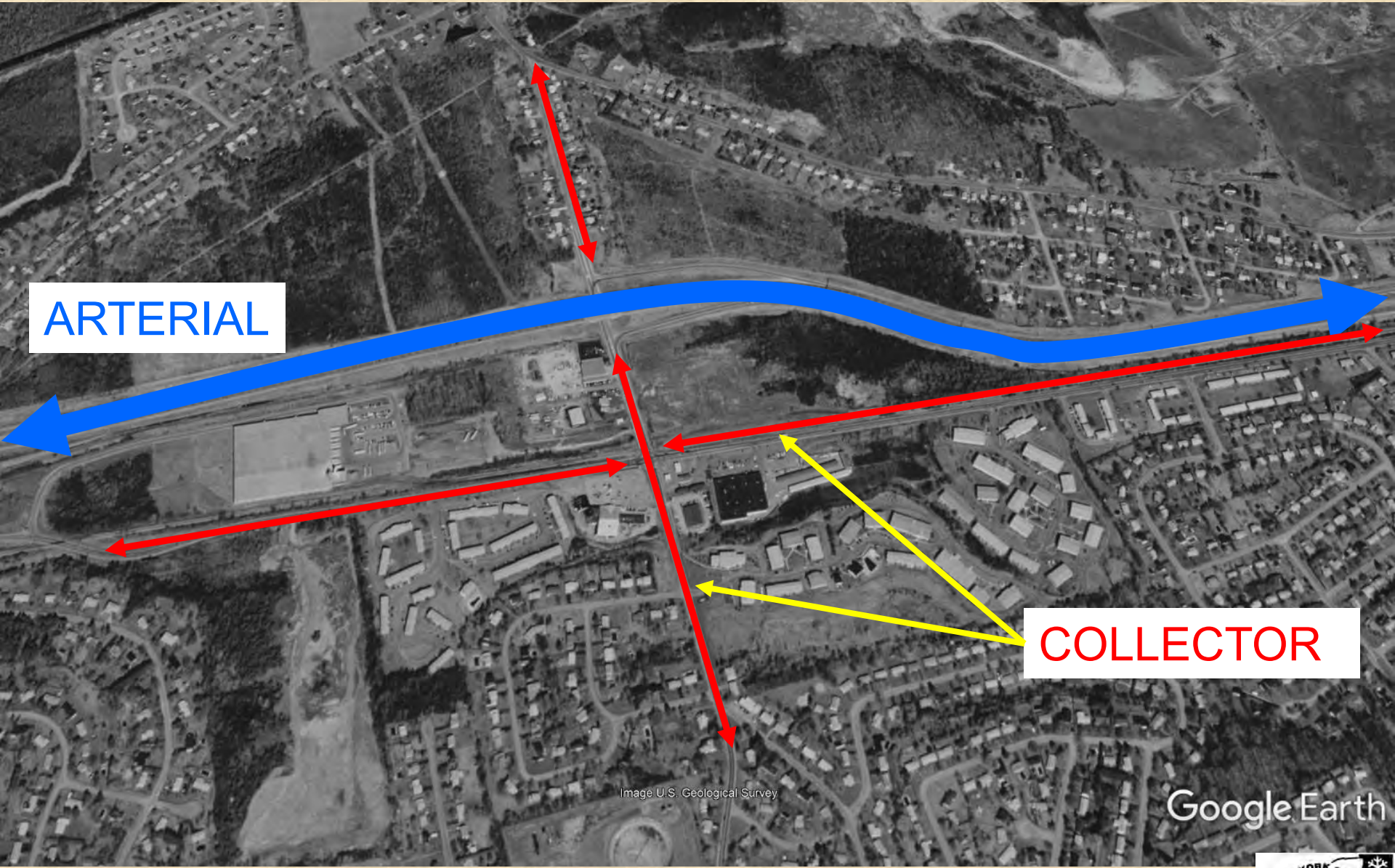
Local Impacts

Your Corridor May Look Like This.....



Local Impacts





ARTERIAL

COLLECTOR

Image U.S. Geological Survey

Google Earth

Example





Image © 2019 New York GIS

Google Earth

Example





Google Earth

Example





Example



Commercial Impacts

“Reduction in quality of life occurs one step at a time”...

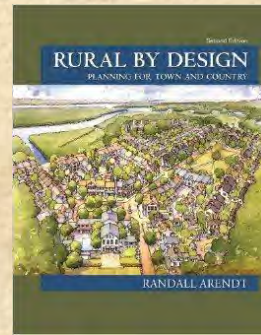
Rural Road Before Commercial Development



Source: Dealing with Change in the Connecticut River Valley

- Rural Setting
- Few Distractions
- Few Stops
- No Turns
- Few Lane Changes
- Design Volume
- Design Flow
- No need for signals

Planning Approach

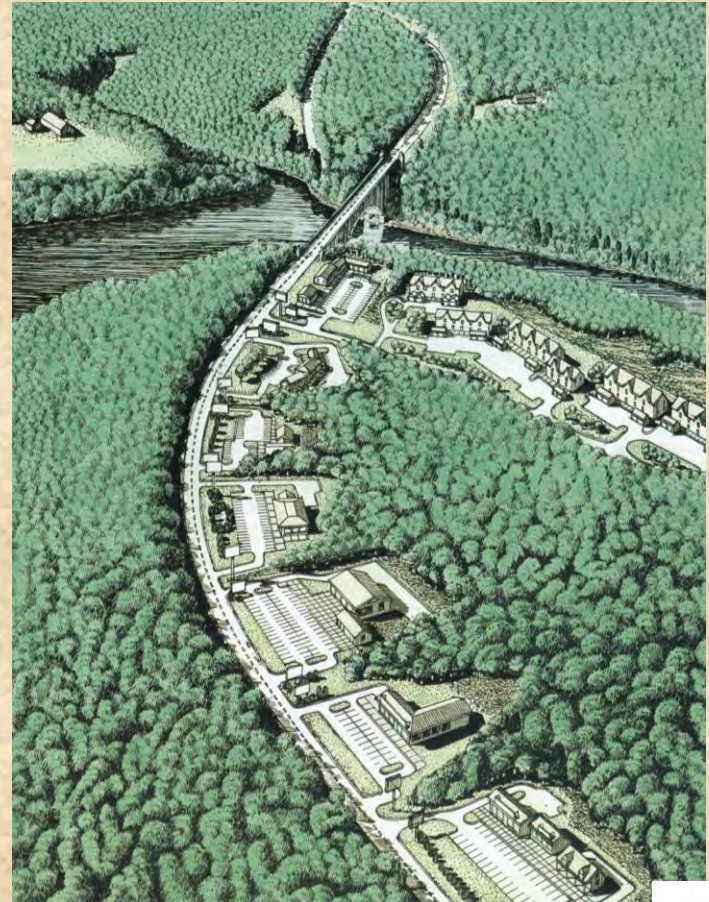


Commercial Impacts

Rural Road After Unplanned Commercial Growth

Impacts:

- Visual Aesthetics
- Visual Distractions
- Increased Stopping
- Increased Turning
- More Lane Changes
- High Volume
- Disrupted Flow
- Multiple Signals Warranted



Source: Dealing with Change in the Connecticut River

“Reduction in quality of life occurs one step at a time”



Cumulative Impact of Poor Management

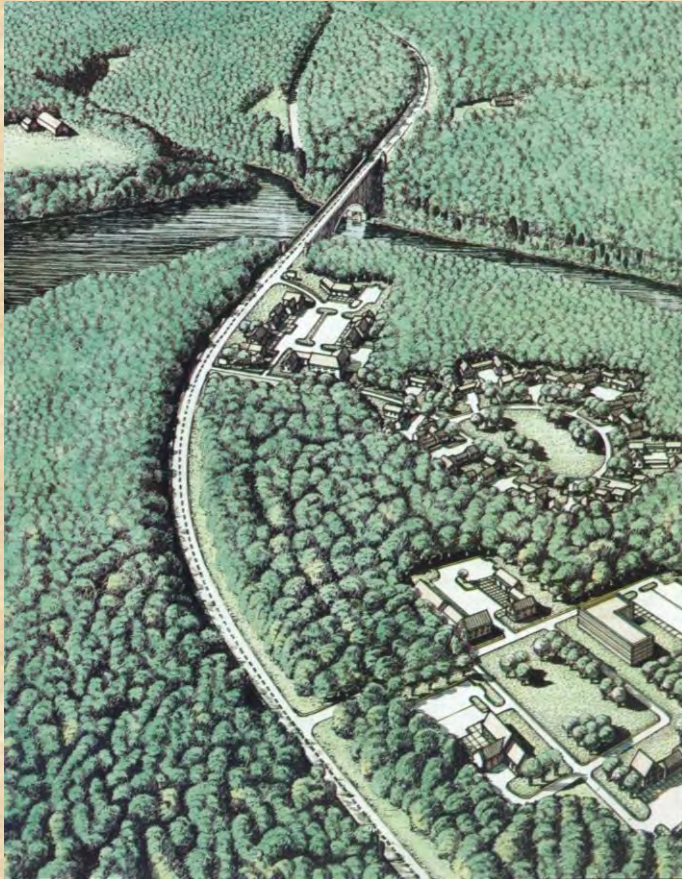


“Reduction in quality of life occurs one step at a time”



Community Planning

Rural Road After Planned Commercial Development



Source: Dealing with Change in the Connecticut River Valley

- Mitigating Factors:
- Maintain Aesthetics
 - Minimize Distractions
 - Limit Stopping
 - Reduce Turning
 - Minimize Access
 - Maximize Volume
 - Maintain Flow & Function
 - Minimal Signals Warranted

“Reduction in quality of life occurs one step at a time”



Residential Impacts

Rural Area Before Residential Development

- Rural Setting
- Open Farmland
- Local Traffic
- Low Traffic Volume
- Low Human Impacts

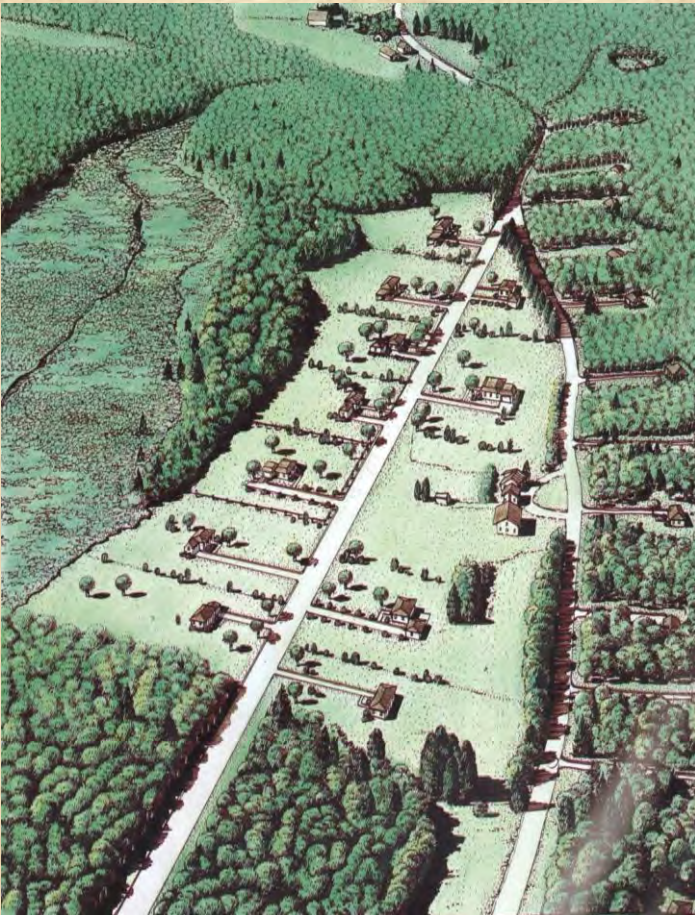


Source: Dealing with Change in the Connecticut River Valley

“Reduction in quality of life occurs one step at a time”

Residential Impacts

Rural Road After Typical Residential Development



Impacts:

- Suburban Setting
- Loss of Farmland
- Increased Traffic
- Impact to Highway Function
- Increase in Driveways
- Open Space Consumption

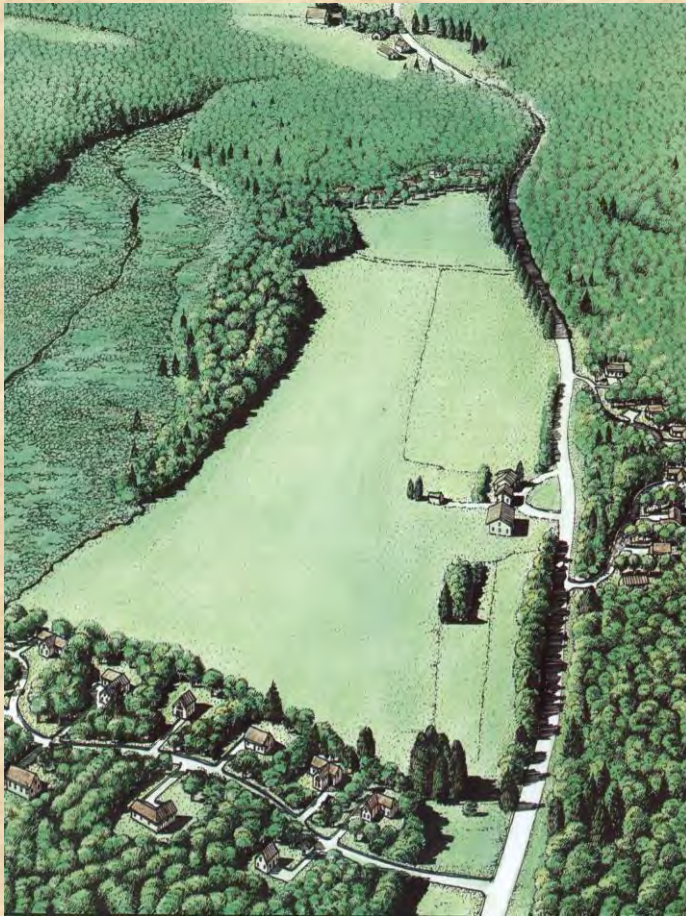
Source: Dealing with Change in the Connecticut River Valley

“Reduction in quality of life occurs one step at a time”



Community Planning

Rural Road After Open Space Planning



Mitigating Factors:

- Maintain Rural Setting.
- Maintain Viable Farmland.
- Maintain Highway Function.
- Maintain Setbacks.
- Limited Access to Collector.
- Limit Turning Movements
- Limit Impacts to Services

Source: Dealing with Change in the Connecticut River Valley

“Reduction in quality of life occurs one step at a time”

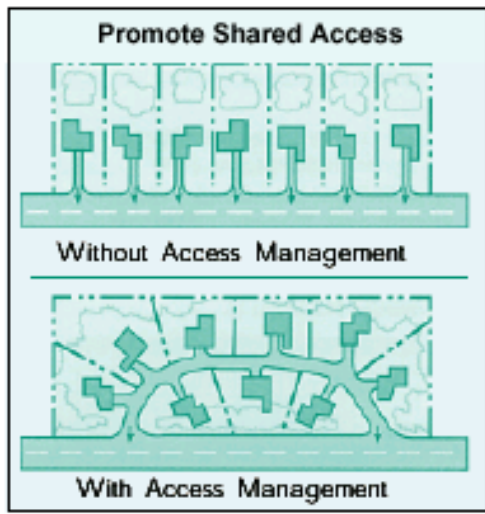


ALWAYS, ALWAYS, ALWAYS

- Encourage Cross Access
- Encourage Reverse Access
- Shared Access



Concentrated Access



Source: Access Management CD Library

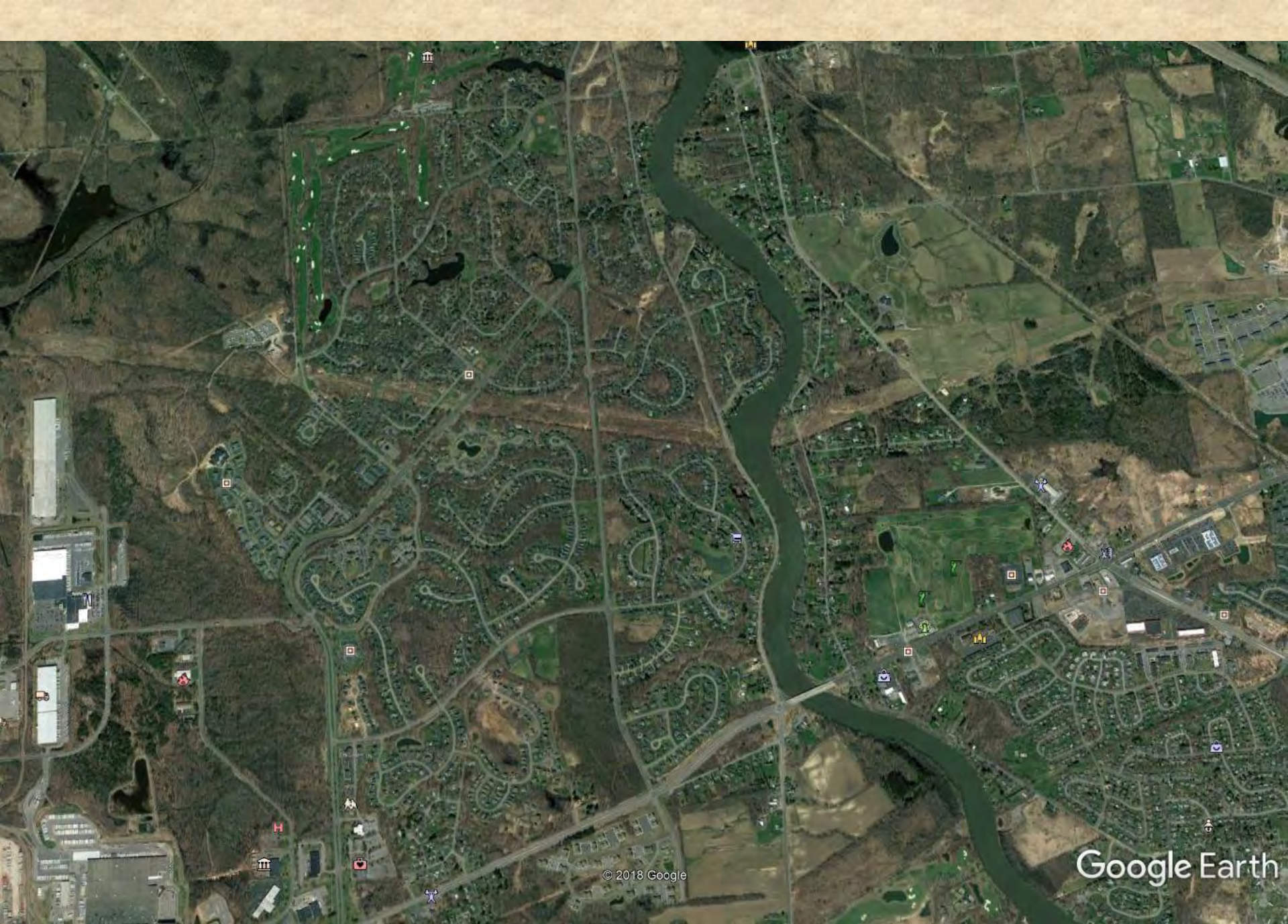
- Maintain Function
- Promote Shared Access
- Allow Access in a Safe Location
- Avoid Irregular Offsets
- Avoid Poor Geometry

Planning Techniques



Local Management Tools

- ✓ Rezoning – for location and density
- ✓ Larger lot sizes and frontage requirements
- ✓ Driveway spacing, location and design
- ✓ Shared driveways and cross access
- ✓ Reverse access
- ✓ Increase setbacks
- ✓ Intersection spacing standards
- ✓ Easements for future roads
- ✓ Restrict commercial strip zoning
- ✓ Restrict flag lots and lot splits
- ✓ Require planned access prior to subdivision approval
- ✓ Local Road Improvements

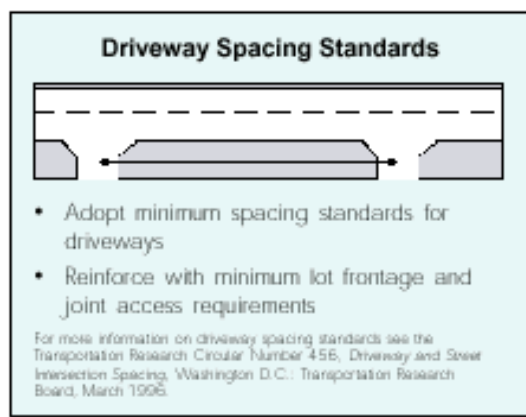


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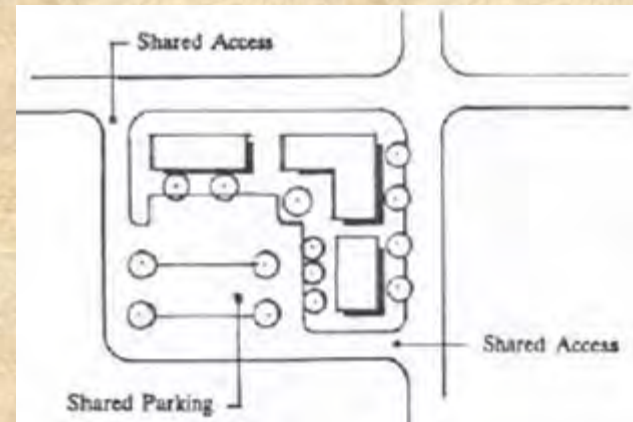
Improve Safety

Adopt Minimum Spacing Standards



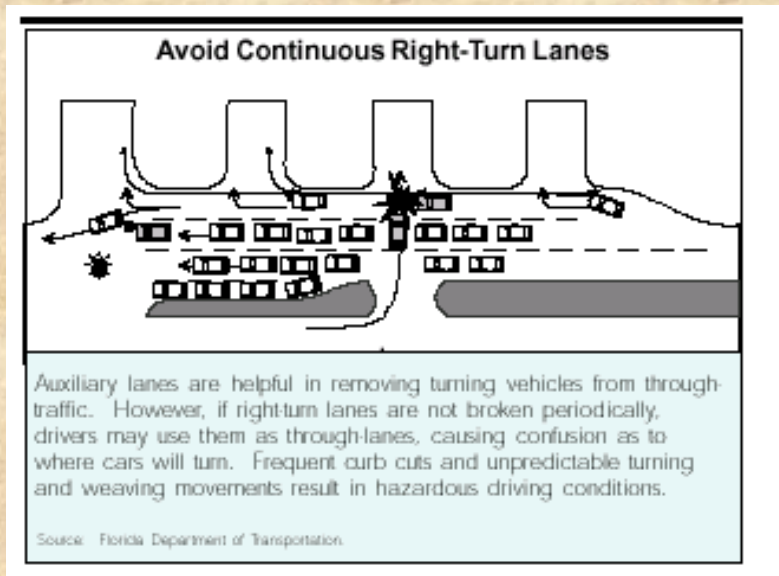
Source: Access Management CD Library

- Avoid Driveways Near Intersections.
- Maintain Adequate Site Distance
- Implement Distance Requirements.
- Don't allow "100% Road Cuts."



Source: Cayuga County Planning

Limit Side Friction



Source: Access Management CD Library

- Too Many “Road Cuts”
- Turning Movements
- Lane Changes
- Driver Distractions

Encourage Good Design



....Encourage this

Discourage this...



Planning Techniques

Encourage Good Design

Discourage this...



....Encourage this

Planning Techniques



Encourage Good Design



Implement the Intent of Your Plan



Maintain Your Intent

The Big Picture





Make the Best of the Review Process

- Cooperate with permitting agencies & developers.
- Encourage the use of PDD/PUD and clustering.
- Improve Commercial Site Plan Review.
- Improve Subdivision Review.
- Use highway overlay techniques
- Update your Code and Definitions





1980



2016

© 2019 Google

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Google Earth

Make the Best of the Review Process

- Encourage Quality Design, Landscaping, Screening and signs.
- Address the Big Picture (i.e. not just this project but spin off potential).
- Update the Comprehensive Plan and Take Measures to Implement the Plan when reviewing Projects
- **REMEMBER YOUR “VISION !”**



Questions....?



"If you don't know
where you're going,
you'll probably end
up somewhere else."

- Yogi Berra



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