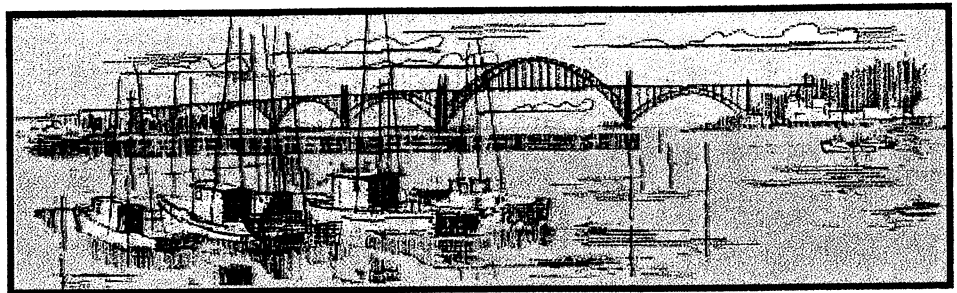


# **CITY OF NEWPORT**

## **ACCESS MANAGEMENT PLAN**



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## **NEWPORT ACCESS MANAGEMENT PLAN**

### **Introduction**

The purpose of the Access Management Plan is to define an effective access management program that will enhance mobility and improve the safety of roadways in the City of Newport. Access management strategies that limit the number of conflict points, separate conflicts as much as possible, reduce deceleration requirements and separate turning traffic from through traffic will all contribute to better mobility and safety on the City of Newport's roadways.

The primary focus of this access management plan is on the major arterials in the City of Newport; Highway 101 and Highway 20. The plan seeks to maintain the function of these roadways as the primary through routes in the City of Newport. The Access Management Plan as detailed in the following sections, establishes policies and criteria that support this function.

### **Background**

State Highways 101 and 20 are the primary arterials in the City of Newport. Travel on these highways has greatly increased due to the growth of employment and tourism in the city over the last 15 years. The City of Newport has grown at a mostly steady pace since its incorporation in 1882, with a population of 9,785 in 1996. Population is expected to reach 15,200 by 2016. In addition to these year round residents, there are numerous vacation homes in the City, as well as seasonal increases in population due to tourism. This increases the actual number of users for City services, especially the transportation system.

It is estimated that between four and five million people annually travel through Newport. In 1985, the Cascades West Economic Development District estimated that tourism accounted for nearly 38 percent of all jobs in Lincoln County. As of 1991, there were approximately 1,500 hotel/motel units and 782 recreational vehicle spaces within the City of Newport. Tourism continues to play a strong role in the local economy and place a strong demand on the local transportation system with the addition of the Mark Hatfield Marine Sciences Center and Oregon Coast Aquarium in the same South Beach area. The recent addition of the whale facility and the arrival of Keiko at the aquarium have spurred tourism to this site beyond that experienced in recent years. Tourism is generally on an upward trend caused by a variety of factors, including the general economic conditions, population growth in Western Oregon, and the popularity of the Northwest with retirees and visitors.

Highway 101 is the major north-south transportation link for Newport, as well as the major route for the Oregon coast from Washington to California. The increased travel demand on Highway 101 has resulted in traffic congestion and delay in getting on or across the highway, which is worse during peak tourism months. Traffic volumes have grown over time at an average rate of 2 percent, but from 1993 to 1994, the ADT increased 2.56 percent. With the installation of the additional tourist attraction of Keiko and the whale facility, traffic volumes for 1995 and 1996 are expected to show a

continuation of strong growth. Available count information collected in 1996 indicated that seasonal traffic is about 6 percent higher for the summer months of 1996 than would have been projected using recent annual growth trends.

Highway 20 is the major east-west route between Newport and the Interstate 5 corridor and points in between, as well as one of the primary east-west routes for the central Oregon coast. Traffic volumes along Highway 20 are considerably less than Highway 101. Although the ADT did not change between 1992 and 1993, there was a 2.38 percent increase in the following year.

City minor arterial streets are SW Abalone Street, SW 32<sup>nd</sup> Street, SE Bay Boulevard, SE Ferry Slip Road, Harney Drive, SE John Moore Road, the proposed North-South Arterial, and SE OSU Drive. The remaining roadways are collector and local roads. Figure 1 summarizes the functional classification of the City of Newport roadways.

### **Access Management Requirements & Tools**

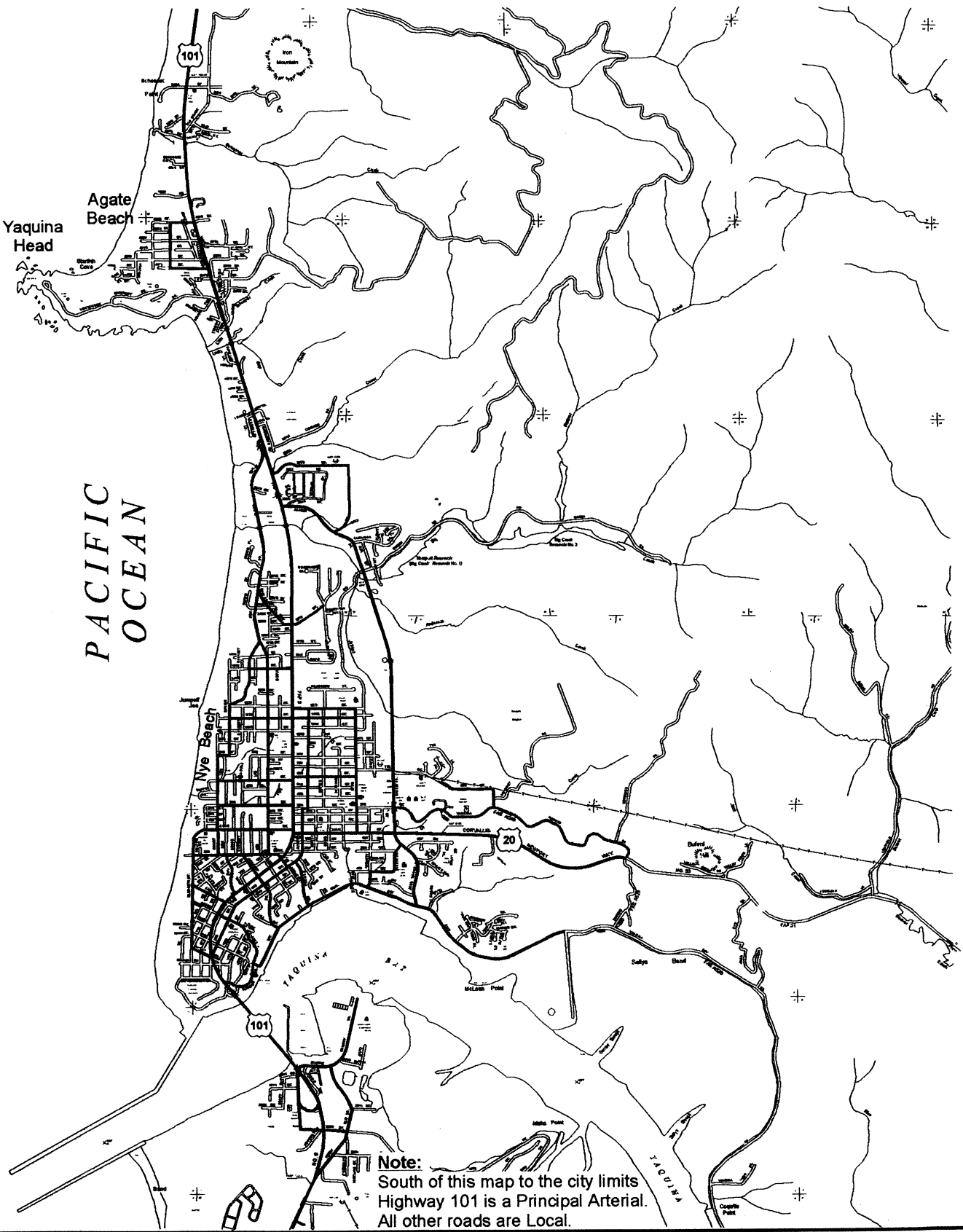
The Access Management Plan must address the growth in traffic in Newport through planning for the future transportation system. The Oregon Transportation Planning Rule requires in section 660-12-045 subsection (2):

*Local governments shall adopt land use or subdivision ordinance regulations, consistent with applicable federal and state requirements, to protect transportation facilities, corridors and sites for their identified functions. Such regulations shall include: (a) Access control measures, example, driveways and public road spacing, median control and signal spacing standards, which are consistent with the functional classification of roads and consistent with limiting development on rural lands to rural uses and densities.*

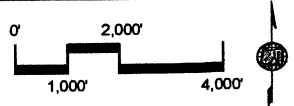
The 1991 Oregon Highway Plan (OHP) sets forth access management categories and standards for state highways, establishing six access management categories for ODOT's highway system. These categories are discussed in the plans and policies section of this plan.

Access management can be most effectively implemented when it is integrated into the land use permitting process. For developing areas, this allows jurisdictions an immediate tool to implement their access management goals as these areas apply for permits and submit plans for agency review. Applying access management to a developed arterial –representative of the conditions of many sections of Highway 101 and Highway 20 in the City of Newport – is a much more difficult due to right-of-way limitations and the economic concerns of adjacent property owners. In such areas, access management can best be implemented as adjacent properties redevelop or as part of roadway improvement or retrofit plans.

Access management is a set of measures to regulate access to streets, roads and highways from public roads and private driveways. The purpose of access management is to maximize the efficiency and safety of the existing roadway while preserving the flow of traffic and limiting the number of traffic conflicts. A traffic conflict

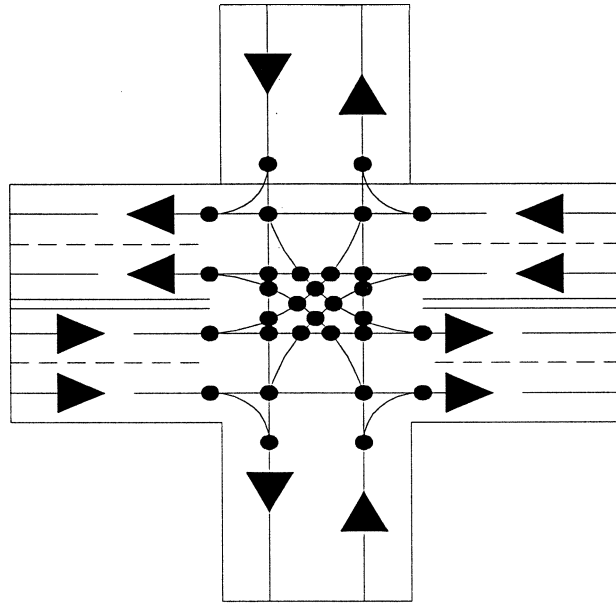


<b>Legend:</b>	Principal Arterial		Local	
	Minor Arterial			
	Collector			



occurs where the paths of two traffic movements intersect. Crossing conflicts are the most serious because of the potential for collisions. The area and complexity of the crossing conflicts are also affected by the roadway cross-section. For example, with a four-lane cross-section, each conflict point involves two lanes, whereas with a two-lane section, each of the conflict points involves only one lane. Figure 2 provides an illustration of the conflict points for a four-lane section. In this configuration there are 32 conflict points.

**Figure 2: Conflict Points for a Four-Lane Section**



There are many different strategies for accomplishing access management but the common theme of all strategies is to reduce traffic conflicts. Strategies to reduce conflicts are listed below followed by select examples of tools that can be used to implement the strategy:

- Limit the number of conflict points
  - ✓ Installation of median barriers or closure to eliminate left turns at ingress and egress points
  - ✓ Installation of traffic signals at high volume intersections or driveways
  - ✓ Optimization of traffic signal spacing and coordination
  - ✓ Installation of physical barriers along frontage properties, e.g., curbs, fences, landscaping
  - ✓ Regulate maximum width of driveways
  
- Separate conflicts as much as possible when they can't be eliminated
  - ✓ Regulate minimum spacing of driveways
  - ✓ Consolidate access for adjacent properties

- ✓ Regulate maximum number of driveways per frontage property
- ✓ Consolidate existing access as parcels redevelop
- ✓ Require access on adjacent cross-street (when available) in lieu of driveways on major highways
  
- Reduce deceleration requirements
  - ✓ Improve driveway sight distance
  - ✓ Increase effective approach width of driveway
  - ✓ Restrict parking on roadway adjacent to driveway to increase driveway turning speeds
  - ✓ Install right-turn acceleration lane
  
- Separate turning traffic from through traffic
  - ✓ Install continuous two-way left turn lane
  - ✓ Require adequate internal design and circulation plan
  - ✓ Provide local service roads
  - ✓ Encourage connections between adjacent properties

Many of these tools can be used within the City of Newport. A review of the existing conditions in the City, current plans and policies for access management and the access management goals and objectives as developed by the Technical Advisory committee is provided in the following section. Specific recommendations for application of these access management strategies is provided in the last section of this access management plan.

## **Existing Conditions**

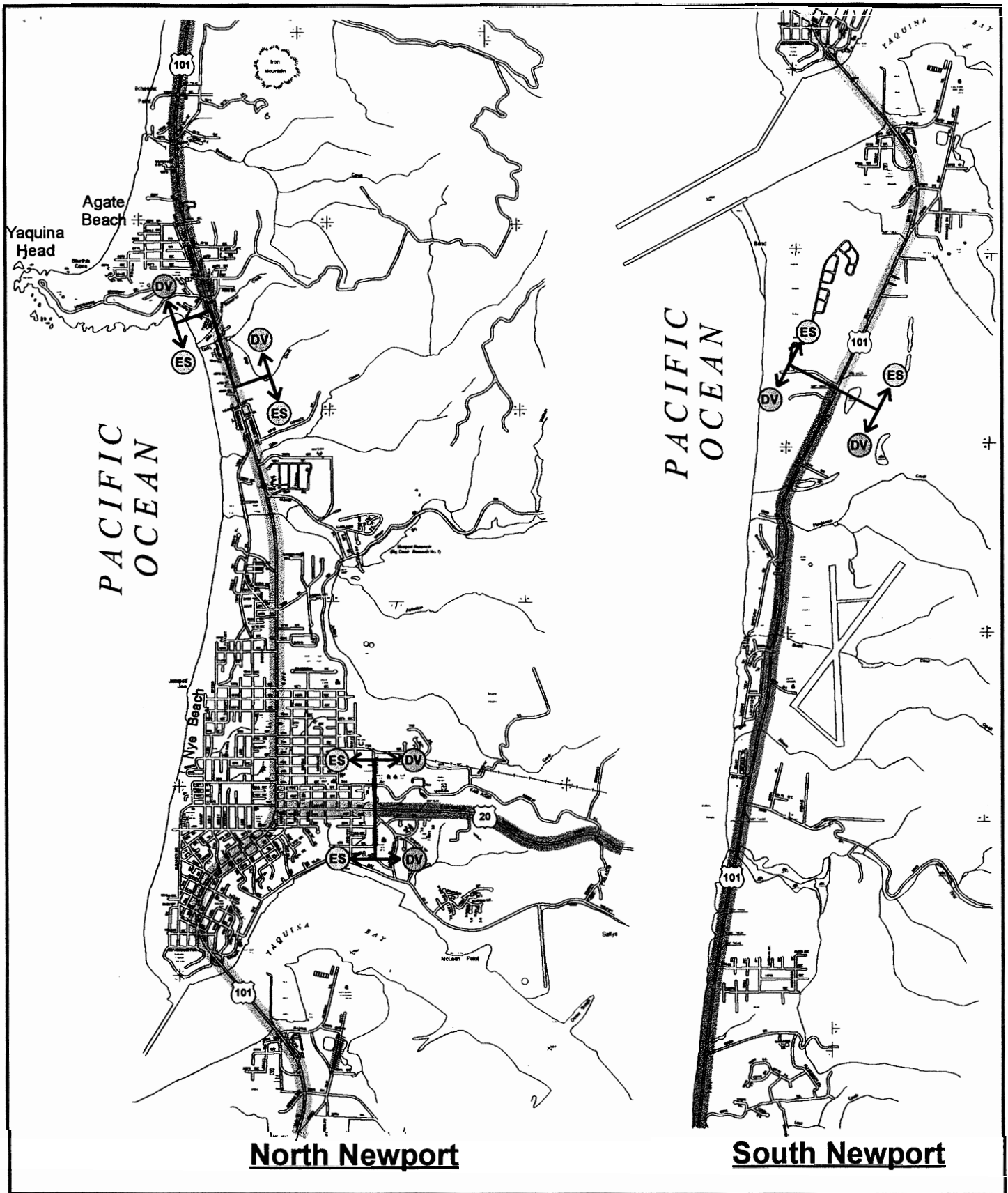
In order to evaluate the strategies and tools for implementing access management, definition of the current and projected conditions is necessary.

Access management strategies will vary with the type of facility, and the type and level of development along the facility. The City of Newport can be described in two distinct 'level of development' categories, established and developing. Established areas are defined as fully developed areas with established accesses for existing businesses and homes. Developing areas are areas where development is currently being built or has been approved by the City for construction, where development has recently occurred or areas that are planned for future development but are not currently developed to their full capacity.



Figure 3 summarizes the limits of the established and developing areas of Highway 101 and Highway 20 within the City of Newport limits.<sup>1</sup>

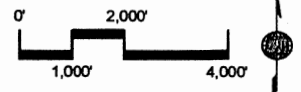
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<sup>1</sup> The TSP Technical Advisory Committee reviewed and agreed on these defined limits during development of the City of Newport TSP.

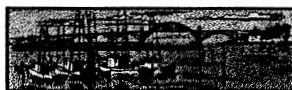


**Legend:**

-  Developing Areas
-  Established Areas



**City of Newport  
Access Management Plan**



**Access Management  
Designations**

**Fig. 3**



**Established Area**

The established area of the city is from Woody Way/NW 44<sup>th</sup> Street on the north to the South Beach State Park Entrance on the south. This area is identified as established because it is fully developed and there are no large lots remaining to be developed. It includes the Newport city center and the established city neighborhoods. The street pattern is established as a grid system and is mostly complete. Future changes in land use would occur only as property redevelops.

Commercial development along Highway 101 begins at approximately NE 25<sup>th</sup> Street and continues on both sides of the highway until the Yaquina Bay Bridge. This commercial development includes large establishments such as Walmart, Fred Meyer, Safeway, and numerous small commercial establishments. The downtown core includes government offices and additional retail uses, and is concentrated between Olive Street and Fall Street.

Away from the highway in the central city area, the high school, the middle school, and two elementary schools are within several blocks east between N.E. 12<sup>th</sup> and SE 2<sup>nd</sup> Streets. The fairgrounds and several ball fields are in this same vicinity. Also in this area, but west of the highway, is the Performing Arts Center, with commercial development in its vicinity. There is a heavy concentration of established residential development on both sides of the highway between NE 25<sup>th</sup> Street and the Yaquina Bay Bridge.

Most of this area is dependent on Highway 101 for direct access. Within this section of Highway 101 there are 36 streets, two of which are offset; 6<sup>th</sup> Street and 12<sup>th</sup> Street. There are 118 driveways of which 13 are within the influence areas of adjacent intersections. There are six major traffic signals along Highway 101 - at 25<sup>th</sup> Street, 20<sup>th</sup> Street, 11<sup>th</sup> Street, 6<sup>th</sup> Street, Olive/Highway 20, and Hurbert Street. Highway 101 varies from three to five lanes in the established area, with sidewalks from 25<sup>th</sup> Street to Marine Science Drive. A portion of Highway 101 from 45<sup>th</sup> Street to 54<sup>th</sup> Street has a dedicated bike lane, and the remainder of the highway has a paved shoulder of 4 feet or greater except in the five lane section from 25<sup>th</sup> Street to the bridge where no shoulder exists. South of the bridge, the established area continues until the South Beach State Park Entrance. There is only one traffic signal south of the bridge, at the intersection of Highway 101 and SE 32<sup>nd</sup> Street/Anchor Way.

Typical intersection spacing along this section of Highway 101 is 250'. For the posted 30 mph sections of Highway 101, FHWA guidelines<sup>2</sup> recommend signalized intersections be spaced at least ¼ mile apart to allow efficient traffic progression. Greater spacing is recommended for higher speed sections. The current signalized locations meet this criterion. Driveway spacing varies extensively throughout the established section of Highway 101. The high number of access points likely contributes to higher than average crash rates for this type of facility classification and generally contributes to highly congested conditions during peak volume periods.

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<sup>2</sup> Technical Guidelines for the Control of Direct Access to Arterial Highways – Volumes 1 & 2, Federal Highway Administration (FHWA-RD-76-86)

The established area along Highway 20 is much smaller. It extends from Highway 101 to John Moore Drive, mostly in the heart of downtown Newport. Highway 20 is a three-lane section with sidewalks on both sides. There is a traffic signal at the intersection with John Moore Drive. Along Highway 20 there are 8 streets, none of which are offset. There are 47 driveways of which 3 are within the influence area of the intersections.

Highway 20 is also posted for 35 mph in this section of the City. Typical intersection spacing is 350' and, as with Highway 101, driveway spacing varies extensively.

***Developing Area: North Newport***

There are two sections of Newport defined as developing. For the North Newport Developing Area, the limits extend along Highway 101 from the UGB to Woody Way, just south of Agate Beach (southbound direction), and to approximately NW 44<sup>th</sup> Street (northbound direction). For Highway 20, the developing area extends from John Moore Drive east to the UGB. In these areas, both highways are primarily two-lane sections with no pedestrian facilities. A center turn lane is provided on Highway 101 in the Agate Beach area at 73<sup>rd</sup> Street, at the Theater and RV park (approximately 58<sup>th</sup> Street to 62<sup>nd</sup> Street) and between 32<sup>nd</sup> Street and 55<sup>th</sup> Street.

Beginning at the north boundary of the city, at about 73<sup>rd</sup> Street, the land uses are residential. There is a new RV park on the west side of Highway 101 south of NW 66<sup>th</sup> Street. Mainly residential uses continue both east and west of the highway within the city limits until approximately NE Harney Drive. There are exceptions, including a movie theater adjacent to the east side of Highway 101 at NE 60<sup>th</sup> Street, the Agate Beach Golf Club on NE 40<sup>th</sup> Street, some motels along the west side of Highway 101, and scattered commercial uses. Yaquina Head access is from Highway 101. The Yaquina Head Outstanding Natural Area includes the interpretive center, ADA accessible tide pools, Yaquina Head lighthouse, bird rookeries and tide pools. This area is both a park and scenic viewpoint.

Residential uses include both single-family homes and apartments. Residential development west of the highway is constrained by the narrow strip of buildable land between Highway 101 and the ocean south of Yaquina Head. The Longview Hills development, a 150+ unit retirement community of manufactured homes, is east of the highway at approximately NE 54<sup>th</sup> Street. Shore Pine Hills is another community located east of the Highway 101. The Pacific Homes Beach Club is east of the highway at NE 32<sup>nd</sup> Street.

Within the North Newport developing area, there are 12 existing streets and 13 driveways. Many of the local streets provide access for residential uses thus reducing the need for driveway access on Highway 101. As noted above, there are some commercial sites with direct highway access, including the movie theater at NE 60<sup>th</sup> and motels along the west side of Highway 101.

Most of this section is posted for a 55 mph speed limit but this may change to 45 mph in the near future. Intersection spacing varies but most are in the range of 250' – 500'. Driveway spacing varies extensively with some spacing as low as 100'.

### ***Developing Area: South Newport***

The second 'developing' section of Newport starts south of the bridge at the South Beach State Park Main Entrance and extends to the south UGB. In this section, Highway 101 is primarily a two-lane section, with no pedestrian facilities; it has a 4-foot shoulder for bicyclists.

Land uses include the South Beach State Park located to the west of Highway 101. There are some residential developments west of Highway 101 including South Shores Estates, Pacific Shores and Surfland. The airport is located east of the highway south of SE 62<sup>nd</sup> Street, and there is additional residential development south of the airport to the east of the highway.

Land designated for high-density residential development is planned both to the east and west of Highway 101, near 32<sup>nd</sup> Street, and south of the airport. This land use designation allows for apartments, resorts, motels, and mobile home parks. There are two large parcels of land in this portion of the subarea under common ownership that total about 791 acres that are zoned for residential use. Future development of these parcels is under discussion between the city and the property owner and the site may include the mixed-use Wolf Tree Resort development, which would involve residential, commercial, and recreational uses. The final size of this development has not yet been determined, but it may involve the entire acreage. The development is, however, limited to a planned destination resort by zoning and Goal 8.

There are 11 existing streets within the South Newport developing area: Park Entrance, SE 62<sup>nd</sup> Street, SW 68<sup>th</sup> Drive, SW 73<sup>rd</sup> Street, SW 74<sup>th</sup> Street, SW 82<sup>nd</sup> Street, SW 95<sup>th</sup> Street, SE 98<sup>th</sup> Street, SE 116<sup>th</sup> Street, SE 123<sup>rd</sup> Street, and SE 130<sup>th</sup> Drive. There are also approximately 6 private driveways, mostly for residential uses.

Most of this section is posted for a 55 mph speed limit. Intersection spacing varies between ¼ - ½ mile with the majority being spaced at ½ mile or greater. Driveway spacing varies extensively but there are relatively few existing driveways and no particular pattern is established.

### ***Crash Data***

An evaluation of crash data, traffic volumes and access points was completed for the TSP and this Access Management Plan. The Oregon Department of Transportation (ODOT) provided crash data for the five-year period from January 1, 1990 through December 31, 1994. The data was specifically for Highway 101, Highway 20 and the City of Newport street network.

Highway 101 was divided into nine segments in the vicinity of the City of Newport. Highway 20 was divided into two segments. Table 1 and Table 2 identify each segment, milepost boundary, the number of crashes that occurred during the five-year period, the number of intersections and the number of driveways.

**Table 1: Highway 101 Segments**

Milepost Limits	Limit Description (North to South)	1993 ADT <sup>1</sup>	Number of Crashes	Crash Rate <sup>2</sup>	App. # of Access Points		Access/ Mile
					Intersection	Driveways	
135.71 to 139.02	Urban Growth Boundary to South of Big Creek (where four-lane section begins)	14,300	36	0.33	12	13	7.2
139.03 to 139.99	Big Creek to NE 8th Street	16,500	137	4.34	8	42	52.1
140.00 to 140.37	NE 8th Street to Corvallis-Newport Highway	17,700	149	13.65	9	29	102.7
140.38 to 141.37	Corvallis-Newport Highway to Yaquina Bay Brid	14,700	185	7.40	15	38	53.5
141.38 to 141.98	Yaquina Bay Bridge	14,100	23	2.58	na	na	na
141.99 to to 142.4	Yaquina Bay Bridge to Ferry Slip Road	14,100	23	3.09	4	9*	27.7
142.47 to 143.42	Ferry Slip Road to Park Boundary	12,380	10	0.70	3	5*	8.4
143.43 to 145.66	Park Boundary to 98th	11,730	26	0.55	5	5	4.5
145.67 to 146.46	98th to the Urban Growth Boundary	11,700	1	0.00	6	1	8.9
Approximate Boundaries of Established Areas			Avg. Rate	2.33	62	142	

Notes: The number of crashes corresponds to the five-year period from 1/1/90 to 12/31/94.

1 The ADT is from ODOT data and represents an average annual ADT

2 The crash rate is for 1993 only. Crash rate is the number of crashes per million vehicle miles of travel.

\* These sections include a continuous driveway area serving multiple properties.

**Table 2: Highway 20 Segments**

Milepost Limits	Limit Description (North to South)	1993 ADT <sup>1</sup>	Number of Crashes	Crash Rate <sup>2</sup>	App. # of Access Points		Access/ Mile
					Intersections	Driveways	
0.00 to 0.76	Highway 101/Highway 20 Intersection to East City Limits	12,000	43	1.70	8	47	72.30
0.77 to 1.91	East City Limits to Urban Growth Boundary	10,000	6	0.21	3	1	3.50
Approximate Boundaries of Established Area			Avg. Rate	0.85	2	2	

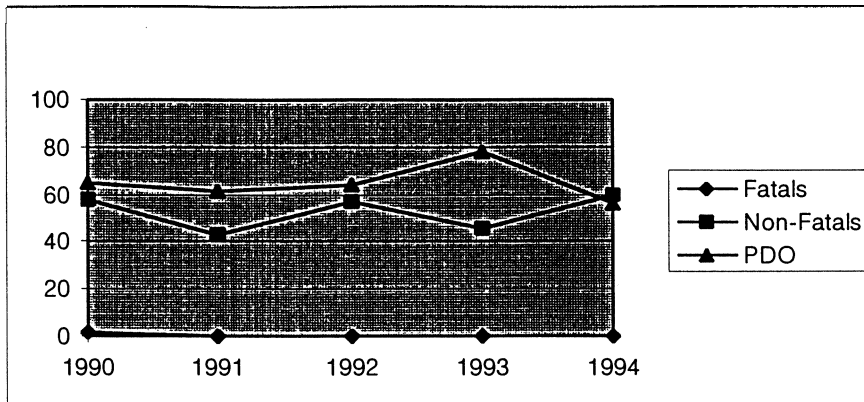
Notes: The number of crashes corresponds to the five-year period from 1/1/90 to 12/31/94.

1 The ADT is from ODOT data and represents an average annual ADT

2 The crash rate is for 1993 only. Crash rate is the number of crashes per million vehicle miles of travel.

A total of 590 crashes were reported on Highway 101 during this five-year period (See Figure 4). Of this total, 264 were non-fatal crashes, 324 were property damage only, and two were fatal crashes. The injury crashes resulted in two fatalities and 403 injuries. On Highway 101, the most prevalent types of crashes were rear-end (42.2 percent), and turning movements (34.2 percent), followed by sideswipe-overtaking (6.1 percent), and fixed/other object (5.8 percent).

Figure 4: Total Number of Crashes on Highway 101



Note: PDO = Property Damage Only

The overall 1993 crash rate along Highway 101 for the study area is 2.33 crashes per million vehicle miles of travel, though several sections within these limits have much higher rates. The statewide average for similar facilities is .83. There were 12 locations where ten or more crashes occurred during the five-year period. They are listed in Table 3. All of these high crash locations are within the designated 'established' areas.

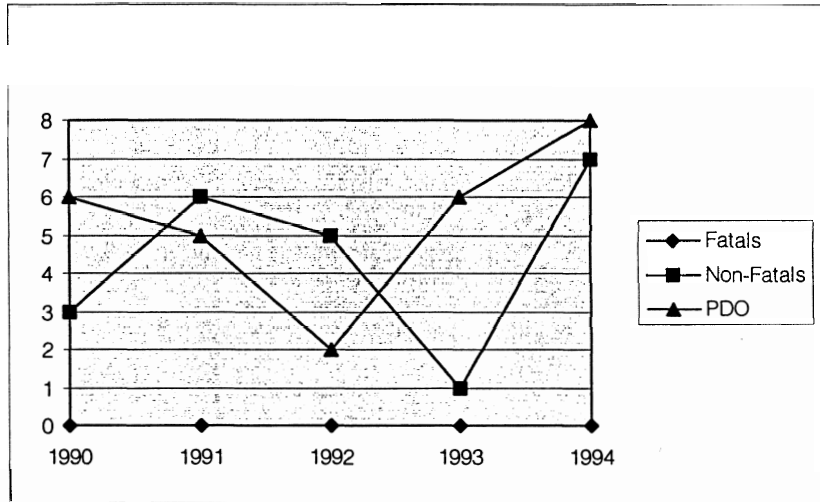
Table 3: Highway 101 High Crash Location

Milepost	Number of Crashes	Cross-Street (if applicable)	Types of Crashes
139.32	18	NW 20th Street	9 REAR, 5 TURN, 2 SS-O, 1 ANGL, 1 HEAD
139.79	15	NE/NW 11th Street	5 TURN, 4 REAR, 3 ANGL, 2 PED, 1 BACK
140.09	13	-----	6 REAR, 5 TURN, 2 FIX
140.32	11	-----	5 REAR, 4 TURN, 1 ANGL, 1 PED
140.36	19	-----	8 TURN, 3 SS-O, 3 REAR, 2 FIX, 1 PED, 1 ANGL
140.37	24	Highway 20	11 REAR, 8 TURN, 3 SS-O, 1 ANGL, 1 PED
140.59	11	-----	7 REAR, 1 TURN, 1 O-TN, 1 ANGL, 1 PED
140.73	11	Alder Street	7 TURN, 3 REAR, 1 ANGL
140.93	19	-----	11 REAR, 7 TURN, 1 ANGL
141.07	12	Newport Frontage Rd.	8 REAR, 3 TURN, 1 ANGL
141.15	20	-----	12 REAR, 4 ANGL, 4 TURN
141.67	11	Yaquina Bay Bridge	8 REAR, 1 O-TN, 1 FIX, 1 MISC

Note: REAR = Rear-end, TURN = Turning Movement, SS-O = Sideswipe-Overtaking, ANGL = Angle, HEAD = Head-on, PED = Pedestrian, FIX = Fixed Object, O-TN = Overturned, and MISC = Miscellaneous.

For Highway 20, a total of 49 crashes were reported during this five-year period (See Figure 5). There were 22 non-fatal crashes, 27 property damage only, and no fatal crashes. The injury crashes resulted in 29 injuries. The most prevalent types of crashes occurring on US 20 were turning movement (32.7 percent), rear-end (28.6 percent), and angle (26.5 percent) crashes.

Figure 5: Total Number of Crashes on Highway 20



The overall 1993 crash rate along Highway 20 for the study area is 0.85 crashes per million vehicle miles of travel. Though the rate is higher on Highway 20 in the established area it is still below the statewide average and likewise well below several sections on Highway 101. Though the number of driveways in this section is still relatively high, the commercial development in this area is less vehicle intense and driveway usage is likely not as frequent as areas along Highway 101. There was only one location that experienced ten or more crashes during the five-year period -- this occurred at MP 0.04 where 17 crashes happened (ten angle, six turning movement, and one backing).

Based on a review of the crash data, traffic volumes and number of accesses there appears to be a direct correlation between the number of accesses and the number of crashes. This relationship is most apparent when comparing the accident rate on each section to the number of accesses per mile. The highest accident rate is for the section of Highway 101 between NE 8<sup>th</sup> Street and Highway 20. This section also has the highest access/mile rate at 102.7. This relationship between accesses and crash rates is similar to observations along similar facilities within the state. Access management strategies applied in these corridors can be expected to reduce crashes and improve safety.

### Current Plans and Policies

The current applicable plans and policies for both the Oregon Department of Transportation and the City of Newport were reviewed for sections pertinent to access management.

## ***City of Newport Comprehensive Plan***

### ***Transportation Element***

Under this element of the Newport Comprehensive Plan, Policy 6 states that - *The city shall coordinate with the Oregon Department of Transportation in the formulation and implementation of access management programs for Highway 101 and Highway 20.*

### ***Engineering Standards***

The City does not have a classification or standards for Highways 101 or 20 since these are State highways. In the City's Engineering Standards these roads are referred to as "major urban highways." The Engineering Standards do address the City's streets and sets out standards for these streets. City standards restrict access on City arterial streets, as described below, indicating that the City supports access restrictions on arterial streets.

#### ***Arterial Streets***

By definition, arterial streets should connect areas of principal traffic generation and major urban (and rural) highways. The Arterial Network will provide the collection and distribution of traffic (including public transit) onto the minor street network of collector and local streets. The location of an arterial should help define land use and should strengthen neighborhood identity.

Arterial streets should form a "continuous street network" and these routes should be given preferential treatment over collector and local streets in the signing and signalization of intersections. The intersection of local streets directly with major arterials should be discouraged. Wherever possible, local street access to the arterial should be provided through the collector street network.

#### **Planning Criteria: An Arterial Street**

- Should have limited direct access to adjoining properties
- Should not be accessed by private drives in new plats

#### ***Collector Streets***

Collector streets serve internal traffic within areas having a single land use pattern. The collector streets carry local traffic within a neighborhood area. They carry traffic from the local streets to the minor and/or major arterial network or to schools, local shopping centers, or other local streets within the neighborhood

#### **Planning Criteria: A Collector Street**

- May provide same access to abutting property as local streets
- Should serve as links between minor traffic generators and arterial streets

#### ***Local Streets***

Local streets provide direct access to abutting property. Through-traffic should be discouraged. Careful planning and the use of circuitous street layout will break up the continuity of traffic movement. Some form of street closure or traffic diverter can convert the typical grid street pattern into a form of circuitous street layout. When

properly planned and designed, traffic control devices will not be necessary at intersecting local streets.

Planning Criteria: A Local Street

- Should have the primary function of providing direct access to property
- Should not have direct intersections and sole connections with major arterial streets

**Oregon Department of Transportation**

The 1991 Oregon Highway Plan establishes six access management categories for ODOT's highway system. These categories were reviewed during development of the Oregon Coast Highway Corridor Plan. In that plan, Highway 101 in Newport has been identified as a Category 3 from the north city limits to Big Creek, a Category 4 from Big Creek to Ferryslip Road, and a Category 3 from Ferryslip Road to the south city limits. A definition of these categories is provided below. Table 4 summarizes the classification system attributes for these categories from the OHP.

Category 3:

These highway segments provide for efficient and safe medium to high speed and medium to high volume traffic movements, on interregional, intercity and longer distance intracity routes. The segments are appropriate for areas that have some dependence on the highway to serve land access and where financial and social costs of attaining full access control would substantially exceed benefits. This category includes some of the statewide facilities.

Category 4:

These highway segments provide for efficient and safe medium to high speed and medium to high volume traffic movements, on higher function interregional and intercity highway segments. They also may carry significant volumes of longer distance intracity trips. They are appropriate for routes passing through areas that have moderate dependence on the highway to serve land access and where the financial and social costs of attaining full access control would substantially exceed benefits. This category includes a small part of the statewide facilities and most regional facilities.

**Table 4: ODOT Spacing Guidelines**

Category	Access Treatment	LOI (1)	Urban/Rural	Intersection				Signal Spacing (4)	Median Control
				Public Road		Private Drive (3)			
				Type (2)	Spacing	Type	Spacing		
3	Limited Control	Statewide	U	At grade/Inch	1/2 - 1 Mile	Rt. Turns	800	1/2 - 1 M.	Partial
4	Limited Control	Statewide	U	At grade/Inch	1/4 Mile	Lt./Rt. Turns	500	1/2 M.	Partial/None (7)

In comparing these guidelines with existing spacing, many sections of Highway 101 and Highway 20 do not meet ODOT's current spacing guidelines.



## **Access Management Goals & Strategies to Implement**

During the development of the Newport TSP, specific access management goals were established for the City of Newport's primary arterials, Highway 101 and Highway 20. These access management goals address these facilities in both the established and the developing areas of the city. The goals reflect the input of the Technical Advisory Committee, the Citizens Sounding Board, and public input from the Open Houses as well as correspondence from members of the public. The access management goals are a subset of the Transportation Goal developed as part of the City of Newport TSP process.

The City of Newport's Access Management Goal for primary arterials is:

*Develop an access management strategy for the established and developing areas of the City of Newport along Highway 101 and Highway 20 that supports the City's Transportation Goal, and ensures that Highway 101 and Highway 20 can accommodate traffic in a safe and efficient manner as traffic increases.*

Supporting access management goals were developed for the two types of areas in the City: established areas and developing areas. The goals for these areas are defined below as well as the range of strategies that was explored by the study team.

### ***Established Areas***

The supporting goal for primary arterials in established areas is:

*Encourage consolidation or reduction of accesses as possible during property redevelopment and/or frontage improvements.*

Many properties now having direct access to the highway within these established areas will eventually redevelop. At such time, alternate access may be provided and existing private accesses can be closed. The reduction in traffic conflicts, due to preventing future private accesses and closing old private accesses, will allow the highway to operate safely at higher volumes of traffic.

The types of access management tools most appropriate for these established areas include:

- ✓ Optimize traffic signal spacing and coordination
- ✓ Install physical barriers along frontage properties, e.g., curbs, fences, landscaping
- ✓ Regulate maximum width of driveways
- ✓ Regulate minimum spacing of driveways
- ✓ Consolidate access for adjacent properties
- ✓ Regulate maximum number of driveways per frontage property
- ✓ Require access on adjacent cross-street (when available) in lieu of driveways on Highway 101 or Highway 20
- ✓ Require adequate internal design and circulation plan
- ✓ Encourage connections between adjacent properties
- ✓ Install traffic signals at high volume intersections or driveways

Spacing goals for the established areas are 500 feet for driveways, 1/4 mile for public roads and 1/2 mile for signals. As redevelopment occurs, these spacing standards and access management tools should be evaluated and applied as appropriate to the specific needs of the project.

### ***Developing Areas***

The supporting goal for primary arterials in developing areas is:

*As sites develop or redevelop, accesses are to be planned, consolidated and/or reduced to meet the spacing standard. New development will, to the greatest extent possible, comply with access management standards.*

The types of access management tools most appropriate for these developing areas include:

- ✓ Install median barriers or closure to eliminate left turns at ingress and egress points
- ✓ Install traffic signals at high volume intersections or driveways ✓
- ✓ Optimize traffic signal spacing and coordination ✓
- ✓ Install physical barriers along frontage properties, e.g., curbs, fences, ✓ landscaping
- ✓ Regulate maximum width of driveways ✓
- ✓ Regulate minimum spacing of driveways ✓
- ✓ Consolidate access for adjacent properties ✓
- ✓ Regulate maximum number of driveways per frontage property ✓
- ✓ Require access on adjacent cross-street (when available) in lieu of driveways on major highways ✓
- ✓ Improve driveway sight distance
- ✓ Increase effective approach width of driveway
- ✓ Install right-turn acceleration lane
- ✓ Install continuous two-way left turn lane
- ✓ Require adequate internal design and circulation plan ✓
- ✓ Provide local service roads
- ✓ Encourage connections between adjacent properties ✓

Spacing standards for primary arterials in developing areas are 800 feet for driveways, one-half to one mile for public roads, and one-half to one mile for signals. As development and redevelopment occurs, these spacing standards and access management tools should be evaluated and applied as appropriate to the specific needs of the project.

## **Access Management Plan**

The Newport Access Management Plan is based on, and carries out, the Access Management Goals described above. Limiting access to higher class roadways such as Highway 101 and Highway 20, maintains their functional integrity and is the basis for successful access management planning.

Given the north-south orientation of the City of Newport with Highway 101 as a central facility, alternatives for south-north movement without the use of Highway 101 are not

available for all travelers. In development of the TSP and this Access Management Plan, a focused effort was placed on development of alternative routes and modes to minimize additional demand for Highway 101 travel. Where alternative routes are not available the impacts of increased travel demand for Highway 101, as well as Highway 20, were minimized to the extent possible. Specific access management treatments were developed for Highway 101 and Highway 20 in the developing areas.

Access management for the City's minor arterial, collector and local streets is based on the current City Engineering Standards and proposed ordinance modifications. The proposed ordinance modifications include additional language for access spacing on minor arterials. Recommended private access spacing for minor arterials in non-residential areas is 200' - 400'. Recommended private access spacing for minor arterials in residential areas is 150' - 300'. These criteria would apply to the North-South Arterial which is classified as a minor arterial.

### ***Established Area***

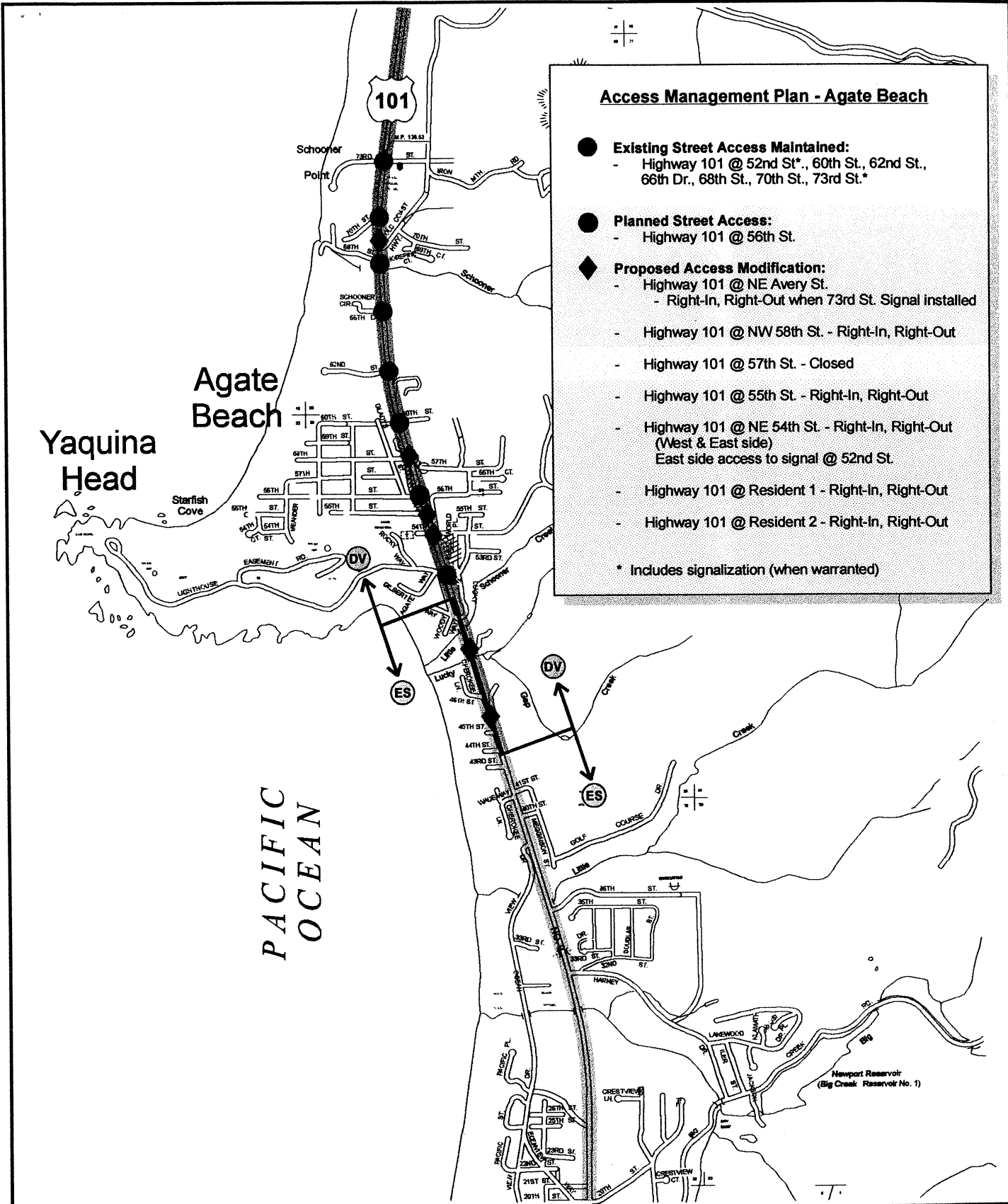
As part of this current access management plan, no specific locations have been proposed for access management treatments within the established areas of the City of Newport. The opportunities to apply the various access management techniques will occur when specific areas are being redeveloped. New access points that violate the spacing standards will not be allowed but each case will be reviewed to achieve a solution that balances the functional needs of Highway 101 and Highway 20 with the circulation and economic needs of the abutting property. Access for redeveloping properties will be required to apply the recommended access management tools including but not limited to consolidation of driveways, minimum driveway spacing requirements, optimum internal circulation design, connections with adjacent properties, and access to cross-streets in lieu of the highway.

### ***Developing Area: North Newport***

The access management plan for the North Newport developing area is detailed in Figure 6. Several tools were evaluated for the North Newport area including driveway and intersection consolidation, median treatments and installation of signals at higher volume streets. Median treatments to restrict turns were considered but were not deemed appropriate for the needs of the area. Alternative modifications that focus on closure of existing accesses, improvement of local service roads, consolidation of traffic flow to existing intersections and limiting left turns at existing intersections were selected as tools that best meet the needs of the local community and maintain the function of Highway 101. These proposed modifications reflect the consensus of the North Newport community, the TAC and City of Newport staff. The specific recommendations of the plan are summarized below.

Three access categories are identified for 'developing' areas of Newport's principal arterials, Highway 101 and Highway 20: *Existing Street Access to be Maintained*, *Planned Street Access* and *Proposed Access Modification*. The *Existing Street Access to be Maintained* denoted with a green circle, typically represent access points that meet the spacing standard, or that will be allowed an exception, and will be maintained. The second category, *Planned Street Access*, is denoted with a blue circle. These locations

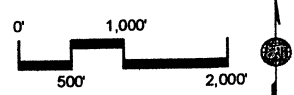
represent planned access points that meet the spacing standard. The third category, *Proposed Access Modification*, is denoted with a purple diamond, and represents locations where modifications such as closures or right-in, right-out treatments are proposed.



- ### Access Management Plan - Agate Beach
- **Existing Street Access Maintained:**
    - Highway 101 @ 52nd St., 60th St., 62nd St., 66th Dr., 68th St., 70th St., 73rd St.\*
  - **Planned Street Access:**
    - Highway 101 @ 56th St.
  - ◆ **Proposed Access Modification:**
    - Highway 101 @ NE Avery St.
      - Right-In, Right-Out when 73rd St. Signal installed
    - Highway 101 @ NW 58th St. - Right-In, Right-Out
    - Highway 101 @ 57th St. - Closed
    - Highway 101 @ 55th St. - Right-In, Right-Out
    - Highway 101 @ NE 54th St. - Right-In, Right-Out (West & East side)
      - East side access to signal @ 52nd St.
    - Highway 101 @ Resident 1 - Right-In, Right-Out
    - Highway 101 @ Resident 2 - Right-In, Right-Out
- \* Includes signalization (when warranted)

**Legend:**

○ DV	Developing Areas	▬
○ ES	Established Areas	▬



Within the North Newport developing area, the following existing street accesses will be maintained: 73rd Street, NW 70th Street, NW 68th Street, NW 66th Drive, NW 62nd Street, 60th Street, and 52nd Street. The preferred spacing in this section of Highway 101 is a minimum of ½ mile for public roads. The spacing for these roads ranges from ¼ to ½ mile. Opportunities to consolidate these roads to other access points were investigated but no viable alternatives were identified.

There is one new Highway 101 access proposed at 56th Street. This access represents the consolidation of local traffic demand to a single access point. The project would be completed in conjunction with improvements to the local service road system and closure of the Old Loop Highway between NW 55<sup>th</sup> Street and NW 58<sup>th</sup> Street. This project would include revisions to make NW 58<sup>th</sup> Street and NW 55<sup>th</sup> Street right-in right-out access only.

There are six planned modifications to existing access points. At Highway 101 and NE Avery Street, Highway 101 and NW 58th Street, and Highway 101 and NW 55<sup>th</sup> Street the existing full access will become right-in, right-out only. This type of treatment will help to reduce delay and improve safety by preventing the conflicting left-hand turns on and off of Highway 101. The same right-in right-out treatment will be applied to the Highway 101 and 54<sup>th</sup> Street intersection. Residents on the east side of the highway will have the alternative for full access at 52<sup>nd</sup> Street.

At 57th Street, the access to Highway 101 will be closed with alternative access provided from 60th Street. This closure will support better spacing of the public road access points. There are also two existing residence access points to Highway 101 near Lucky Gap Creek and NW 45th Street which will become right-in, right-out only.

Installation of traffic signals appears warranted for both the 73<sup>rd</sup> Street and 52<sup>nd</sup> Street during the 20 year TSP planning horizon. Access modifications and closures along Highway 101 in the vicinity of 52<sup>nd</sup> Street will make this intersection a primary service point for existing and planned development east of the highway. Planned development east of Highway 101 and the connection of 71<sup>st</sup> Street to 73<sup>rd</sup> Street (and the subsequent closure of the Old Coast Highway access) are the primary contributors to meeting the signal warrant for 73<sup>rd</sup> Street.

Signal warrants were also investigated at 60<sup>th</sup> Street. When improvements are completed to Gladys Avenue and many of the existing adjacent Highway 101 accesses are converted to right-in right-out (or closed), this intersection will be a primary access to and from Highway 101 for properties west of the Highway. Per the signal warrant analysis, this location would not meet warrants in the 20 year horizon but it should be reevaluated during the planning period. If all three signals were eventually in place, they would meet the desired spacing standards.

In combination, these planned access management modifications will consolidate the existing Highway 101 accesses and improve the safety and efficiency of Highway 101 through this section of the corridor.

***Developing Area: South Newport***

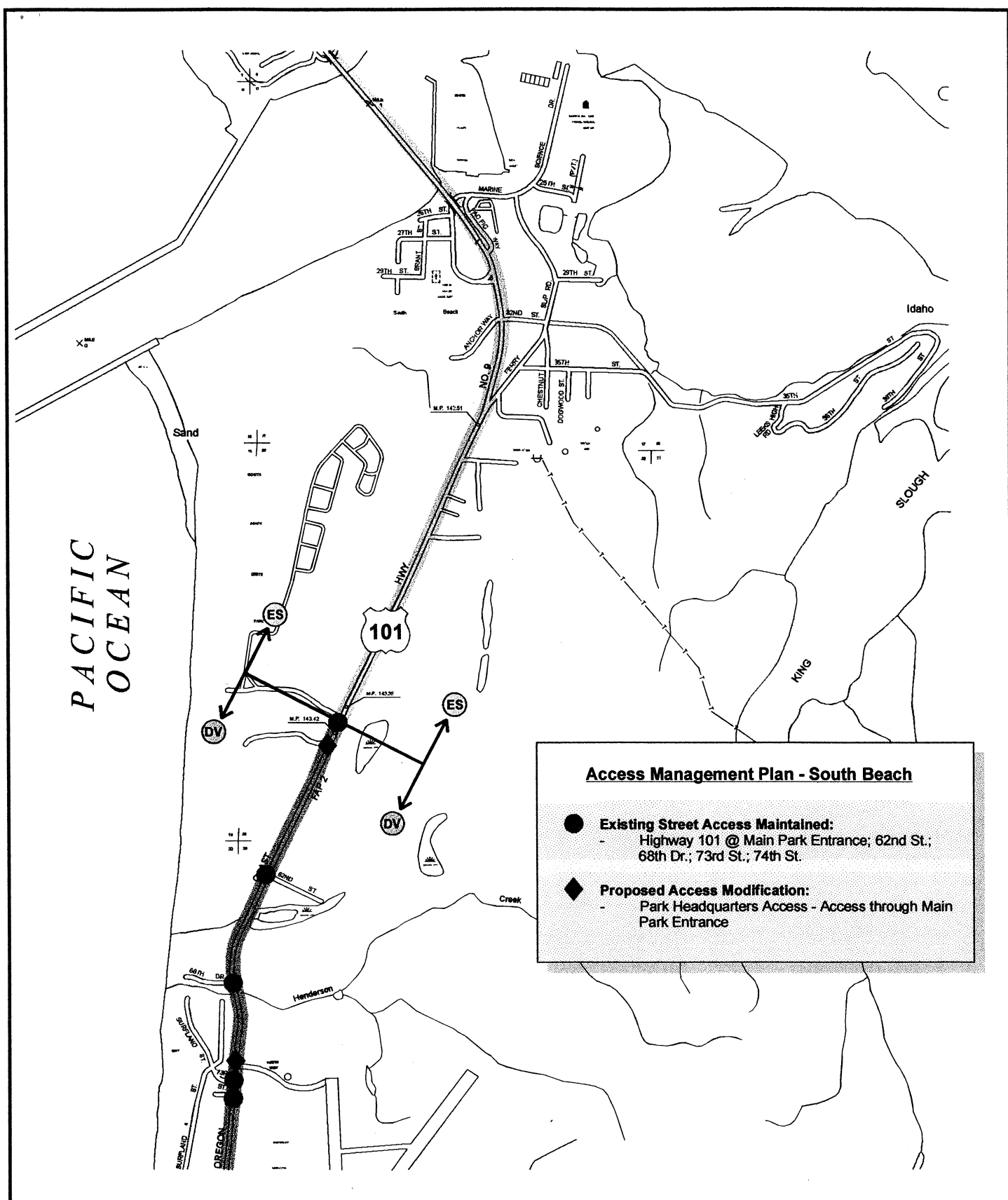
The access management plan for the South Newport developing area is detailed in Figure 7 and Figure 8. As with the North Newport developing area, several access management tools were evaluated for the South Newport area including driveway and intersection consolidation and median treatments. In general, the level of existing development and related access needs are less than that in the North Newport area. This resulted in fewer recommended modifications to the existing system and will allow for better implementation of spacing and access standards as these properties do develop.

There are 11 existing street accesses in the South Newport Developing area that will be maintained as they currently exist. These include the Park Entrance, SE 62<sup>nd</sup> Street, SW 68<sup>th</sup> Drive, SW 73<sup>rd</sup> Street, SW 74<sup>th</sup> Street, SW 82<sup>nd</sup> Street, SW 95<sup>th</sup> Street, SE 98<sup>th</sup> Street, SE 116<sup>th</sup> Street, SE 123<sup>rd</sup> Street, and SE 130<sup>th</sup> Drive. The majority of these intersections meet the spacing standards. The 73<sup>rd</sup>/74<sup>th</sup> Street intersections are under the spacing standard but 74<sup>th</sup> Street services just a few existing residences and no opportunities are available to cost effectively reroute this traffic to 73<sup>rd</sup> street. The second exception is at the 95<sup>th</sup>/98<sup>th</sup> Street areas where these intersections are approximately ¼ mile apart. In this case the roads service opposite sides of the Highway and no opportunities were identified to consolidate the access.

One new access point will be provided on Highway 101 in the South for the Wolf Tree development midway between SE 98th Street and SE 116th Street. The need for this access is directly contingent of planned improvements by the property owner. If established, the access would meet the spacing standards.

There are three planned modifications to existing access points. The Park Headquarters Access will be consolidated with the Main South Beach Park Entrance instead of its current unique access from Highway 101.

During initial development of the Access Management Plan, the existing northern airport maintenance access was planned to be closed when the east side entrance and associated South Beach arterial are developed. A new fire station has been built on the airport property and the fire department requires that this north entrance remain open to Highway 101 for emergency purposes. There is a possibility that a flashing signal will be installed at this access location to expedite the fire department's departure from the station. In any case, use of this access will be infrequent.

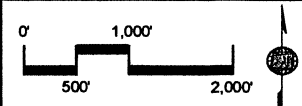


**Access Management Plan - South Beach**

- **Existing Street Access Maintained:**
  - Highway 101 @ Main Park Entrance; 62nd St.; 68th Dr.; 73rd St.; 74th St.
- ◆ **Proposed Access Modification:**
  - Park Headquarters Access - Access through Main Park Entrance

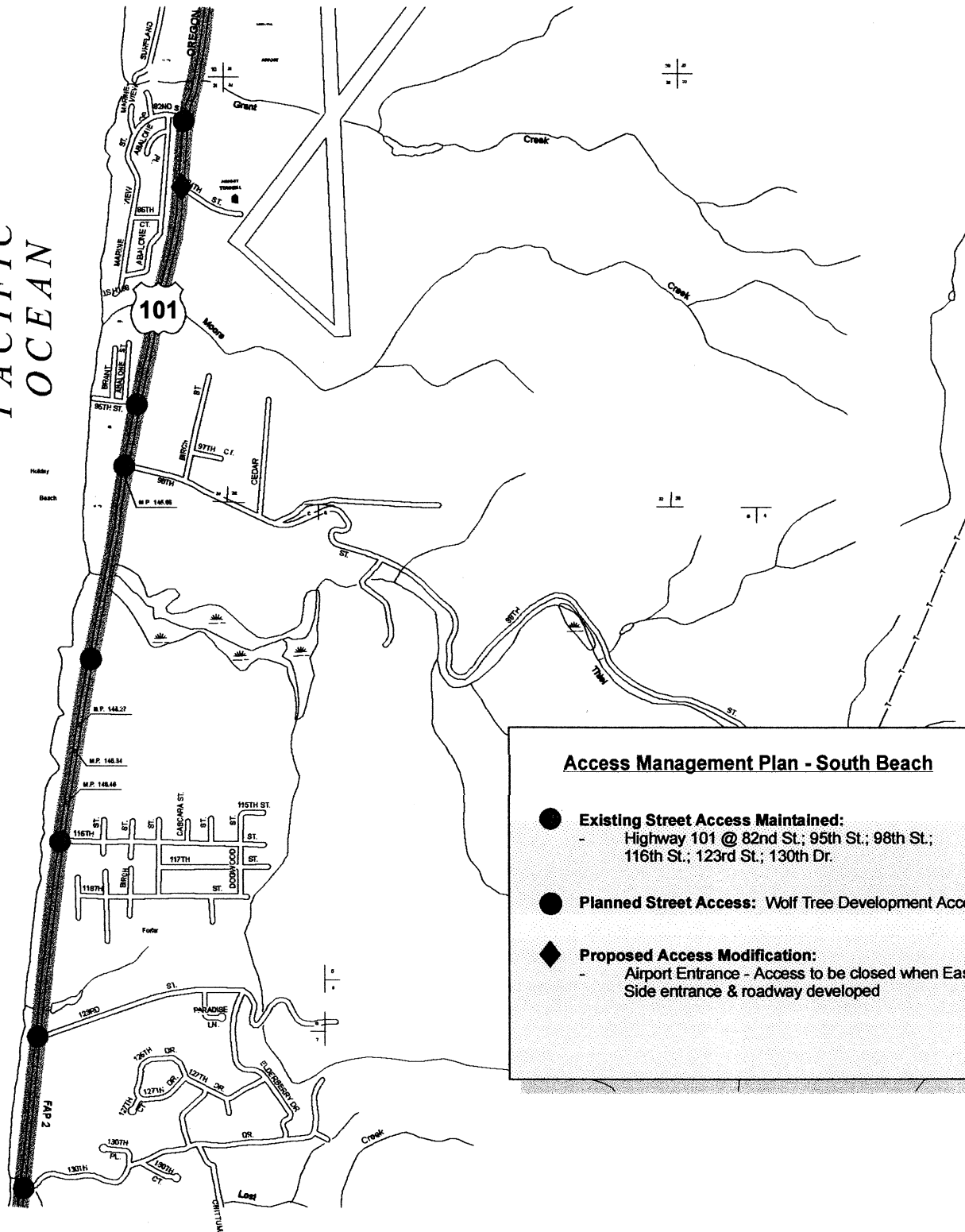
**Legend:**

○ DV	Developing Areas	
○ ES	Established Areas	





PACIFIC OCEAN



**Access Management Plan - South Beach**

- Existing Street Access Maintained:
  - Highway 101 @ 82nd St.; 95th St.; 98th St.; 116th St.; 123rd St.; 130th Dr.
- Planned Street Access: Wolf Tree Development Access
- ◆ Proposed Access Modification:
  - Airport Entrance - Access to be closed when East Side entrance & roadway developed

**Legend:**

○ (with 'DV')	Developing Areas	
○ (with 'ES')	Established Areas	

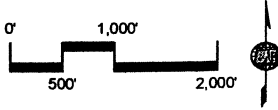


Fig. 8

The southern airport maintenance access will be closed in the future when the South Beach Arterial is built. No modification to this existing access is planned until the alternative airport access is built.

In combination, these planned access management modifications will consolidate the existing Highway 101 accesses and improve the safety and efficiency of Highway 101 through this section of the corridor.

### **Conclusion**

The Access Management Plan was developed in response to the growth in travel in Newport, especially on Highways 101 and 20, and the resulting need to provide for safe and efficient travel within and through the city. The Plan was developed in accordance with the guidelines of the Transportation Planning Rule and the Oregon Highway Plan. The Access Management Plan also takes into consideration the need to address access in different ways for established and developing areas of the city, and is based on the input of city residents in setting goals and objectives for access management in Newport.

The goals and objectives and the Plan for the established areas of the city are consistent with the ODOT Access Management Classification System, Category 4, for Highways 101 and 20. The Plan applies the access management standards as property redevelops in this heavily developed area of the city. No new accesses that violate the standards will be allowed. No existing access will be closed as part of this Plan; access will be reviewed as property redevelops.

The goals and objectives and the Plan for the developing areas of the city are consistent with the ODOT Access Management Classification System, Category 3, for Highway 101. The access management standards have been applied for these areas along the highway as described above. All new accesses must meet the Category 3 standards.

The access management standards for City minor arterials, collectors and local streets are those identified in the current City Engineering Standards, which are incorporated into this Access Management Plan, and identified in the current plans and policies section of this document.

### **Implementation**

The City of Newport views Highway 101 and Highway 20 as the most important arterials in their multi-modal transportation network and likewise recognizes the importance of these facilities as statewide facilities per the Oregon Highway Plan. In implementation of the City's Comprehensive Plan and the associated Transportation System Plan, the City will strive to maintain the function of these facilities to meet their statewide as well as regional needs. Specific access management recommendations for these primary arterials is as follows:

*Implement an access management strategy for the established and developing areas of the City of Newport along Highway 101 and Highway 20 that supports the City's Transportation Goal, and ensures that Highway 101 and Highway 20 can accommodate traffic in a safe and efficient manner as traffic increases.*

*In established areas of the City of Newport, encourage consolidation or reduction of accesses as possible during property redevelopment and/or frontage improvements. Spacing goals for the established areas are 500 feet for driveways, 1/4 mile for public roads and 1/2 mile for signals. As redevelopment occurs, these spacing standards and access management tools should be evaluated and applied as appropriate to the specific needs of the project.*

*In developing areas of the City of Newport, as sites develop or redevelop, accesses are to be planned, consolidated and/or reduced to meet the spacing standard. New development will comply with access management standards. Spacing standards for primary arterials in developing areas are 800 feet for driveways, one-half to one mile for public roads, and one-half to one mile for signals.*

Private access spacing on minor arterials is also addressed in this access management plan. Specific access management recommendations for these minor arterials is as follows:

*Spacing standards for private access on minor arterials in non-residential areas shall be 200' - 400'. In residential areas, private access spacing on minor arterials shall be 150' - 300'.*

The Transportation System Plan is adopted by ordinance by the City of Newport, after review and approval by the Department of Land Use and Transportation. This Access Management Plan is thus also adopted as part of the TSP. After adoption, the City's Engineering Standards will be updated to reflect the Access Management Standards for Highways 101 and 20 and other facilities as documented in this Access Management Plan.