Draft Proposed Revisions to the Guidance for the Administration of the Orange County Master Plan of Arterial Highways - Redlined

2.0 GOALS AND POLICIES

The following goals and policies are intended to serve as recommended countywide guidelines and to provide direction to local agencies that opt to implement the MPAH. A goal is a general expression of countywide values and sets the long range vision for the relationship among transportation and land use. A policy is a specific statement that facilitates decision making regarding issues, process, and constraints.

1. Goal: Provide a Countywide Circulation (Arterial Highway) System to Accommodate Regional Travel Demand

Policies:

1.1 OCTA will review the circulation plans of the cities and the County bi-annually to determine consistency with the MPAH in order to determine eligibility for Measure M2 Net Revenues as well as programs—including the CTFP.

1.2 OCTA will coordinate with various regional agencies (i.e., Caltrans (State), the Southern California Association of Governments (SCAG), the Transportation Corridor Agencies, etc.) on various studies relating to freeway, toll way and transportation corridor planning, construction, and improvement in order to facilitate the planning and implementation of an integrated regional circulation system.

1.3 OCTA will coordinate planning of the arterial highway system cooperatively with cities, the County, SCAG, neighboring counties and neighboring cities in adjacent counties to works towards the consistency of regional transportation networks.

1.4 OCTA will coordinate with local agencies on their respective safety efforts, to encourage a balanced approach to providing for regional travel demand and addressing the needs of all users of the road.

2. Goal: Provide an Arterial Highway System that Supports Land Use Policies of the County and Cities

Policies:

2.1 The MPAH will encourage a coordinated arterial highway system that is in balance with the General Plan Land Use Elements of the cities and County.

2.2 The MPAH will encourage an arterial highway system designed to serve as part of a balanced transportation system (auto, rail, transit, bus, truck, bicycle, pedestrian, etc.).

2.3 OCTA will encourage local jurisdictions to consider and evaluate all mobility needs when requesting modifications to the MPAH[9].

[9] Policy approved OCTA Board on April 11, 2011.

blue = previously-recommended policy
red = currently-proposed policy

2.4 OCTA will encourage and assist all local jurisdictions to adopt comprehensive ~~traffic~~ transportation improvements, phasing and financing plans, in order to assist in countywide implementation of the MPAH.

2.5 OCTA will work with the cities and County through the Orange County CTFP to implement the MPAH and foster interagency cooperation toward anticipating and effectively meeting the regional transportation needs of Orange County.

2.6 OCTA will monitor local agencies to ensure that the arterial highway system is implemented in a manner that supports the implementation of adopted overall land use policies and that is consistent with financing capabilities.

2.7 OCTA prefers the use of analytical methods, in conformance with the Congestion Management Program (CMP), to aid in transportation planning and impact evaluation and encourage the development and utilization of sub-area models to address detailed transportation issues.

For amendments contemplating Complete Streets implementation, multi-modal analysis of peak period person-trip capacity can potentially be accommodated as an acceptable form of analysis, so long as it ~~is~~:

- is consistent with the latest peer-reviewed and professionally accepted state of practice;
- includes ongoing commitment and performance measurement to enable effective ongoing utilization of Complete Streets capacity enhancements such as transit and bike facilities;
- ~~use~~ is approved by OCTA prior to conducting MPAH related analyses; and satisfies OCTA's need for technical justification in support of an MPAH amendment.

2.8 OCTA will use the most recently adopted Orange County Projections (OCP) forecasts for projections of future year population, housing, and employment.

2.9 OCTA will use the Orange County Transportation Analysis Model (OCTAM) forecasts as the regional traffic forecasts for vehicle and transit ridership along the MPAH, and require local agencies to use OCTAM as a basis for data required in local and sub-area studies conducted by local agencies. The OCTAM must be consistent with SCAG's regional model as required by the CMP.

2.10 OCTA will provide guidance for the development of subarea traffic models used by local jurisdictions to determine the quantitative impacts of land use decisions on the circulation system, so as to be consistent with the OCTAM.

2.11 OCTA will establish roadway classification definitions based on the number of through lanes.

2.12 OCTA will review and potentially revise this Guidance document upon major updates to the Highway Capacity Manual (HCM), as necessary.

2.13 OCTA will adhere to the recommended processes identified in these Guidelines. However, the OCTA Board has discretion to amend, modify, and/or waive components of these Guidelines, as may be determined by the OCTA Board to be appropriate to address unique concerns[10].

[10] These concerns may include, without limitation, documentation of impasse with respect to achieving consensus on a proposed amendment,~~;~~ documentation of severe environmental impacts,~~;~~ regional mobility concerns~~;~~, or significant and sustained public opposition.

5.0 MPAH CONSISTENCY REVIEW PROCESS

For a local agency to be eligible for participation in Measure M2 ~~Net~~ net ~~Revenues~~ revenues, as well as programs—including the CTFP, the agency's General Plan circulation element must be consistent with the MPAH. MPAH consistency policies are described below, followed by a description of the procedural steps OCTA will utilize in reviewing MPAH consistency. The MPAH consistency policies are based on the "Renewed Measure M Eligibility Guidelines" Section 3.4 dated (April, 2011), and included in this *MPAH Guidance* as **Appendix 7**.

5.1 MPAH CONSISTENCY POLICIES

1. For an agency's Circulation Element to be consistent with the MPAH, it shall have the minimum planned carrying capacity equivalent to the MPAH for all MPAH links within the agency's jurisdiction. "Planned carrying capacity" shall be measured by the number of ~~through~~ through-lanes on each arterial highway as shown on the local Circulation Element.

2. Agencies are not considered inconsistent as a result of existing capacity limitations on arterials not yet constructed to the ultimate capacity shown on the MPAH.

3. Every two years each local agency must submit a resolution adopted by the governing body attesting that no unilateral reduction in lanes has been made on any MPAH arterial.

4. A roadway on the MPAH that has been unilaterally removed from or downgraded on the local agency's circulation element and/or does not meet the minimum capacity criteria may result in the local agency becoming ineligible to participate in Measure M2 Net Revenues as well as programs—including the CTFP. A local agency's eligibility status may be reinstated upon completion of a cooperative study to resolve the inconsistency. Additionally, the local agency can also re-establish eligibility upon restoring its Circulation Element to its previous state of MPAH consistency.

5. A local agency that unilaterally reduces the number of existing and/or planned ~~through~~ through-lanes on an MPAH arterial built to its ultimate configuration to less than the ultimate capacity shown on the MPAH, shall be inconsistent with the MPAH from the date the governing body action is taken. Unilateral action shall mean physical actions such as striping, signing, or physical restrictions executed by the local agency.[23]

[23] The MPAH does not specify minimum lane widths. Narrowing of travel lanes is not restricted provided the number of through lanes is maintained.

6. A temporary reduction of existing through lanes is permitted if, prior to taking this action, a local agency can demonstrate to OCTA that such action is temporary and can be justified for operational reasons and the agency enters into a binding agreement to restore capacity upon demand by OCTA. OCTA may also determine that the local agency remain eligible on a conditional basis. If the local agency is found ineligible, it shall regain eligibility upon physical restoration of the arterial to its original state, consistent with the MPAH.

~~7. Traffic calming measures shall not be used on arterials classified as Secondary and above on the MPAH. Traffic calming measures may be allowed only on Divided Collectors and Collectors, where it can be demonstrated the calming measures will not reduce vehicle carrying capacity below the actual and projected traffic volumes for the segment and the increased traffic volume on affected MPAH facilities does not result in an intersection level of service (LOS) worse than LOS "D" or the General Plan standard adopted by the affected jurisdiction.[24]~~

7. Traffic calming on regional arterials can most efficiently be achieved through lane narrowings and roundabouts. These are not restricted on MPAH facilities (as long as the number of through lanes are maintained).[25]

The use of other types of traffic calming measures on MPAH facilities ~~The use of traffic calming measures[26] on MPAH facilities~~ shall be administered per the following:

a. For Collectors and Divided Collectors, ~~traffic calming achieved by the speed control measures listed below is permitted~~vertical speed control measures (e.g. speed humps) and horizontal speed control measures (e.g. chicanes) are permitted.~~:~~

~~- Vertical deflections (e.g. speed humps and raised crosswalks)~~

~~- Horizontal measures (e.g. traffic circles and chicanes)~~

b. For Secondary and higher arterials, vertical speed control measures are prohibited. For Secondary and Primary arterials, ~~h~~horizontal speed control measures may be conditionally permitte~~ded~~.

~~[24] Policy approved by OCTA Board on April 13, 1998.~~

[25] Definitions:

- Lane narrowings - achieve speed reductions by narrowing the roadway, usually accompanied by plantings, street furniture, or other vertical elements to draw attention to the constriction and visually bound the space. Includes neckdowns/bulbouts, center island narrowings, and chokers.
- Roundabouts – similar to traffic circles but typically used on higher volume arterials as a form of intersection control; often in replacement of traffic signals or all-way STOP signs.

~~[26] Traffic calming is defined as the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users.~~

i. Prior to implementation, a local agency must demonstrate to OCTA that the horizontal speed control measures will not be a detriment to traffic operations for actual and projected traffic volumes. Multi-modal traffic operations, including safety analysis, shall be considered. Existing and long-range roadway segment analysis shall be considered, along with intersection level of service standards, if applicable. OCTA approvals will remain contingent upon the local agency subsequently satisfying the requirements of the California Environmental Quality Act.

c. For all MPAH facilities, ~~Traffic calming achieved by the~~ volume control measures (e.g. street closures and diverters)~~listed below a~~ are typically implemented to discourage or eliminate through traffic and ~~shall not be used to~~are therefore prohibited ~~restrict through movements on MPAH facilities~~.[27]

~~8.~~

~~Full and half street closures~~

~~Diverters~~

~~Median barriers~~

~~Forced turn islands~~

See **Appendix 8** for additional detail.

~~9.~~8. To be eligible for Measure M2 "fair share" funds, a local agency must adopt a General Plan Circulation Element that does not preclude implementation of the MPAH.

~~10.~~9. A local agency shall be considered conditionally consistent if it requests a change to the MPAH and enters into a Cooperative Study to analyze the request. No change shall be made to the local agency's Circulation Element until after the Cooperative Study is complete and agreement is reached on the proposed amendment.

5.2 MPAH CONSISTENCY REVIEW PROCEDURES

1. On June 30 of every odd year, a local agency wishing to establish eligibility for Measure M2 Net Revenues as well as programs—including the CTFP shall submit to the OCTA Manager of Local Programming the following:

   A. A resolution in a format consistent with **Appendix 8** adopted by the governing body of the local agency.

[27] The MPAH does not restrict the use of volume control measures on non-MPAH streets and driveways that connect to/from the MPAH network.

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APPENDIX 8 TRAFFIC CALMING MEASURES

Traffic calming on regional arterials can most efficiently be achieved through *lane narrowings* and *roundabouts*. These types of traffic calming measures are not restricted on MPAH facilities (as long as the number of through lanes are maintained).[30]

The following table illustrates how the use of other types of traffic calming measures are administered on MPAH facilities.

<table>
<tr><th></th><th>Collector
(two-lane, undivided)</th><th>Divided Collector
(two-lane, divided)</th><th>Secondary
(four-lane, undivided)</th><th>Primary
(four-lane, divided)</th><th>Major
(six-lane, divided)</th><th>Principal
(eight-lane, divided)</th></tr>
<tr><td>Speed Control Measures (horizontal)</td><td colspan="2" rowspan="2">Permitted</td><td colspan="2">Conditionally Permitted</td><td colspan="2">Prohibited</td></tr>
<tr><td>Speed control Measures (vertical)</td><td colspan="4">Prohibited</td></tr>
<tr><td>Volume Control Measures</td><td colspan="6">Prohibited</td></tr>
</table>

[30] Definitions:

- Lane narrowings: achieve speed reductions by narrowing the roadway, usually accompanied by plantings, street furniture, or other vertical elements to draw attention to the constriction and visually bound the space. Includes neckdowns/bulbouts, center island narrowings, and chokers.
- Roundabouts: similar to traffic circles but typically used on higher volume arterials as a form of intersection control; often in replacement of traffic signals or all-way STOP signs.

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The tables below list various examples of each type of traffic calming measure in order of increasing restriction of their use on MPAH facilities. The consideration of traffic calming measures on MPAH facilities remain subject to the MPAH Consistency Policies and local agency sponsorship.

HORIZONTAL SPEED CONTROL MEASURES		
Traffic circles	Raised islands, placed in intersections, around which traffic circulates. They are sometimes called intersection islands. They are usually circular in shape and landscaped in their center islands, though not always. They are typically controlled by YIELD signs on all approaches.	• Permitted on Collectors & Divided Collectors • Conditionally permitted on Secondary & Primary Arterials • Prohibited on Major & Principal Arterials
Chicanes	Curb extensions that alternate from one side of the street to the other, forming S-shaped curves. They are also referred to as deviations, serpentines, reversing curves, or twists. European manuals recommend shifts in alignment of at least one lane width, deflection angles of at least 45 degrees, and center islands to prevent drivers from taking a straight "racing line" through the feature.	
Lateral Shifts	Curb extensions on otherwise straight streets that cause travel lanes to bend one way and then bend back the other way to the original direction of travel. They are occasionally referred to as axial shifts, staggerings, or jogs.	
Realigned Intersections	Changes in alignment that convert T-intersections with straight approaches into curving streets that meet at right angles. A former "straight through" movement along the top of the T becomes a turning movement. Realigned intersections are sometimes called modified intersections.	

VERTICAL SPEED CONTROL MEASURES		
Speed humps	Rounded raised areas placed across the road. They are also referred to as road humps and undulations.	• Permitted on Collectors & Divided Collectors • Prohibited on Secondary & Higher Arterials
Speed tables	Flat-topped speed humps often constructed with brick or other textured materials on the flat section. They are also called trapezoidal humps, speed platforms, and, if marked for pedestrian crossing, raised crosswalks or raised crossings. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on top.	

Raised intersections	Flat raised areas covering entire intersections, with ramps on all approaches and often with brick or other textured materials on the flat section. They are also called raised junctions, intersection humps, or plateaus. They usually rise to sidewalk level, or slightly below to provide a "lip" for the visually impaired.	

VOLUME CONTROL MEASURES[31]		
Full Street Closures	Barriers placed across a street to close the street completely to through traffic, usually leaving only sidewalks or bicycle paths open. They are also called cul-de-sacs or dead ends. The barriers may consist of landscaped islands, walls, gates, side-by-side bollards, or any other obstructions that leave an opening smaller than the width of a passenger car.	• Prohibited on MPAH facilities
Half Street Closures	Barriers that block travel in one direction for a short distance on otherwise two-way streets. They are also sometimes called partial closures or one-way closures.	
Diverters	Barriers placed diagonally across an intersection, blocking through movement. They are also called full diverters or diagonal road closures. Diverters are usually staggered to create circuitous routes through neighborhoods.	
Median Barriers	Raised islands located along the centerline of a street and continuing through an intersection so as to block through movement at a cross street. They are also referred to as median diverters or occasionally as island diverters.	
Forced Turn Islands	Raised islands that block through movements on approaches to an intersection and direct traffic to turn through the intersection.	

~~Traffic calming can be achieved by speed control measures, which include those examples listed below and may be considered on MPAH facilities, subject to MPAH Consistency Policies and local agency sponsorship.~~

	~~Example~~	~~Definition~~
~~VERTICAL~~	~~*PERMITTED ON COLLECTORS AND DIVIDED COLLECTORS*~~ ~~*PROHIBITED ON SECONDARY AND HIGHER MPAH ROADWAYS*~~	
	~~Speed humps:~~	~~Rounded raised areas placed across the road. They are also referred to as road humps and undulations.~~

[31] The MPAH does not restrict the use of volume control measures on non-MPAH roadways and driveways that connect to/from the MPAH network.

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	Speed tables:	Flat topped speed humps often constructed with brick or other textured materials on the flat section. They are also called trapezoidal humps, speed platforms, and, if marked for pedestrian crossing, raised crosswalks or raised crossings. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on top.
	Raised intersections:	Flat raised areas covering entire intersections, with ramps on all approaches and often with brick or other textured materials on the flat section. They are also called raised junctions, intersection humps, or plateaus. They usually rise to sidewalk level, or slightly below to provide a "lip" for the visually impaired.
HORIZONTAL MEASURES	*PERMITTED ON COLLECTORS AND DIVIDED COLLECTORS* *CONDITIONALLY PERMITTED ON SECONDARY AND HIGHER MPAH ROADWAYS*	
	Traffic circles[32]:	Raised islands, placed in intersections, around which traffic circulates. They are sometimes called intersection islands. They are usually circular in shape and landscaped in their center islands, though not always. They are typically controlled by YIELD signs on all approaches.
	Chicanes:	Curb extensions that alternate from one side of the street to the other, forming S-shaped curves. They are also referred to as deviations, serpentines, reversing curves, or twists. European manuals recommend shifts in alignment of at least one lane width, deflection angles of at least 45 degrees, and center islands to prevent drivers from taking a straight "racing line" through the feature.
	Lateral shifts:	Curb extensions on otherwise straight streets that cause travel lanes to bend one way and then bend back the other way to the original direction of travel. They are occasionally referred to as axial shifts, staggerings, or jogs.
	Realigned intersections:	Changes in alignment that convert T-intersections with straight approaches into curving streets that meet at right angles. A former "straight through" movement along the top of the T becomes a turning movement. Realigned intersections are sometimes called modified intersections.

Traffic calming achieved by volume control measures shall not be used to restrict through movements on MPAH facilities[33] and include the following:

	Measure	**Definition**
NO	*PROHIBITED ON MPAH FACILITIES*	

[32] Traffic circles are distinguished from roundabouts. Roundabouts are often used to substitute traffic signals or all-way STOP signs as a form of intersection control. Roundabouts are not considered traffic calming measures, but rather, an alternative intersection control method that can be considered on arterial highways. However, when the use of a roundabout results in a reduction in lane capacity, an agency is still subject to the MPAH Consistency Policies, particularly with regard to maintaining the number of through lanes.

[33] The MPAH does not restrict the use of volume control measures on non-MPAH roadways and driveways that connect to/from the MPAH network.

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	~~Full Street Closures~~	~~Barriers placed across a street to close the street completely to through traffic, usually leaving only sidewalks or bicycle paths open. They are also called cul-de-sacs or dead ends. The barriers may consist of landscaped islands, walls, gates, side-by-side bollards, or any other obstructions that leave an opening smaller than the width of a passenger car.~~
	~~Half street closures:~~	~~Barriers that block travel in one direction for a short distance on otherwise two-way streets. They are also sometimes called partial closures or one-way closures.~~
	~~Diverters:~~	~~Barriers placed diagonally across an intersection, blocking through movement. They are also called full diverters or diagonal road closures. Like half closures, diagonal diverters are usually staggered to create circuitous routes through neighborhoods.~~
	~~Median barriers:~~	~~Raised islands located along the centerline of a street and continuing through an intersection so as to block through movement at a cross street. They are also referred to as median diverters or occasionally as island diverters.~~
	~~Forced turn islands:~~	~~Raised islands that block certain movements on approaches to an intersection. They are sometimes called forced turn channelizations, pork chops, or in their most common incarnation, right turn islands.~~