

Introduction to the

Maryland Sidewalk Data Collaboration

One Maryland One Centerline (OMOC)

Sidewalk Event Editor

December 2024

Standard Operating Procedure (SOP)







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Version History

Version	Date	Description
1.0	8/27/2024	PRE-PUBLICATION: ORIGINAL DOCUMENT CREATION
1.1	9/3/2024	PRE-PUBLCATION: ADDITION OF CENTERLINE OVERVIEW
1.2	10/4/2024	PRE-PUBLICATION: ADDITIONAL GUIDANCE FOR ADDING A SIDEWALK ATTRIBUTES "RHAS" FILE FOR IMPROVED EASE OF DATA ENTRY
1.3	12/6/2024	PRE-PUBLICATION: FORMATTING

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Introduction

Purpose

This document provides a basic overview of the process for referencing pedestrian infrastructure data to <u>One Maryland One Centerline</u> (OMOC) using the OMOC Sidewalk Event Editor, accompanying training provided by the Maryland Department of Transportation (MDOT) State Highway Administration (SHA). For more information, contact Francine Waters, Multimodal Transportation Project Specialist: <u>fwaters@mdot.maryland.gov</u>.

The OMOC Sidewalk Event Editor facilitates the documentation of pedestrian infrastructure consistent with a schema developed by the Maryland Sidewalk Data Collaboration, a partnership between agencies and jurisdictions throughout Maryland. The data schema facilitates the uniform organization of data, in this case across a multitude of jurisdictions in Maryland. This structure for the consistent documentation of pedestrian infrastructure facilitates:

- Holistic descriptions of the pedestrian environment, scalable to meet the needs of various users, within OMOC.
- Multi-modal network analyses, which inform work to understand the accessibility of destinations throughout Maryland.

While this guide does not prescribe processes for jurisdictions to use in collecting data on pedestrian infrastructure, it describes workflows for documenting pedestrian infrastructure in situations both with and without existing data. Specifically, the OMOC Sidewalk Event Editor allows jurisdictions to add existing geospatial data to the application for reference in populating the schema¹; in cases where no data exists, the OMOC Sidewalk Event Editor contains aerial imagery for users to reference in documenting the presence of sidewalks.

For step-by-step instructions on the process for pedestrian infrastructure data entry, skip ahead to **Access the OMOC Sidewalk Event Editor** For details on the various functions within the OMOC Event Editor, see **Appendix: OMOC Event Editor Quick Reference**.

¹ For assistance with this process, contact John Beall, State and Local Systems Team Leader: <u>jbeall@mdot.maryland.gov</u>.



Sidewalk Data Schema

The schema includes four event tables: sidewalks, curb cuts, obstructions, and crossings. Attributes describe each event type based on guidance and best practices identified through research and interviews. Many attributes provide information pertinent to Public Right-of-Way Accessibility Guidelines (PROWAG) and Maryland's accessibility requirements (e.g., pedestrian signals, slope, and width); in these cases, the schema reflects the thresholds established by these standards. For example, users input cross slope as either acceptable (<2 %) or unacceptable (>2%), relative to SHA guidance.

PRIORITIZATION AND TIERS

To address disparities in resource availability to collect and maintain pedestrian infrastructure data, the schema groups attributes into tiers. This provides an easily understood prioritization, clearly indicating which attributes are most crucial if forced to scale collection due to resource constraints. While all attributes in **Tier One** are necessary for network analyses, attributes in **Tier Two** and **Tier Three** are not essential for basic network analyses.

Tier One: Core Attributes

Tier One includes the minimum amount of data needed for inclusion in the OMOC. The variables included mainly pertain to the presence or absence of a pedestrian facility with almost no other information.

Tier Two: Advanced Attributes

Tier Two adds more attributes to describe pedestrian infrastructure. Jurisdictions that opt to include Tier Two attributes will document the width, slope, buffer presence, and other attributes related to the sidewalk segment. Tier Two also introduces attributes describing pedestrian crossings and curb cuts.

Tier Three: Accessibility Attributes

Tier Three includes even more detailed information to describe the accessibility of sidewalks. These attributes require more resources to gather and may require in-person verification (e.g., sidewalk condition, obstruction attributes). This tier also includes the obstructions event type, which documents any objects that violate accessibility guidelines (e.g., too narrow or not enough vertical clearance).



SIDEWALKS

Sidewalks are documented as line events, with attributes that describe their presence and form. Despite the name of this table, this table encompasses all standalone, linear pedestrian infrastructure. Add sidewalks to this table by noting the start and end (relative to OMOC centerlines) in the OMOC Sidewalk Event Editor (detailed later in this document); in the case of standalone sidewalks, new centerlines will be created to reference sidewalk features against. This event type has attributes in all three tiers; **Table 1** describes sidewalk attributes by tier.

Table	1:	Sid	ewa	lk A	\ttri	butes

TIER	FIELD	DESCRIPTION AND DOMAINS
	sidewalk_type	Describes whether the sidewalk is adjacent to a roadway.
		Domain: Adjacent to roadway Not adjacent to roadway Null [DEFAULT]
	side_of_roadway	Identifies if segment is located on the left or the right side of the
		route.
		Domain: Left Left and Right Right Shared-Use Path
	relational id	Allows jurisdictions to relate the feature and attributes to a source
		they manage.
TIED	sidewalk collection source	Manual Entry Paparda the method used to desument the sidewalk (e.g., field
	sidewalk_collection_source	collection or imagery trace).
ONE		Domain:
		Field Collection
		Imagery
		OpenStreetMap
		Existing Data
	sidewalk collection date	Records the date the sidewalk was documented, not the date it was
		added to OMOC.
		MM/DD/YYYY
	status	Facilitates the tracking of projects throughout the planning, design,
		and construction process.
		Domain:
		Planning
		Design
		Construction
		Present [DEFAULI]



	maintenance_authority	Documents the party responsible for sidewalk maintenance, for example, local municipality, State Highway Administration, or private landowner.
		Domain: State County Municipal Private Other Null [DEFAULT]
	width_category	Documents whether a sidewalk's width meets federal and/or state
		 Domain: <4' - Does not meet federal guidance 4'-5' - Meets federal but not state guidance 5'-8' - Meets state guidance in a constrained environment 8'+ - Exceeds state guidance Null [DEFAULT]
	width_value	Documents sidewalk width. If the user prefers, they may enter the precise width of the sidewalk feature in order to derive the width category value.
TIER TWO	running_slope_category	Running Slope Category can either be entered by the user or derived (calculated) from running_slope_value. Slope is defined as rise over run; i.e., 1 inch rise: 12 inch run = 8.33% slope. If desired, cross slope is collected in Tier Three. Domain: <5% - Below Federal Guidance; Permitted
	running_slope_value	This is a continuous variable for the slope of sidewalk segment. If the user prefers, they may enter the precise slope of the sidewalk feature in order to derive the slope category value. Slope is defined as rise over run, i.e., 1 inch rise: 12 inch run = 8.33% slope. If desired, cross slope is collected in Tier Three.
	buffer_present	Qualitative assessment of buffer material.
		Domain: Grassy median Patterned concrete pad Brick Other Null [DEFAULT]
	buffer_width	Identifies whether or not the buffer, if present, meets Maryland requirements.
		Domain: 0 - None 0-3' - Below state minimum >3' - Meets state minimum Null [DEFAULT]



	parking_adjacent	Identifies whether street parking exists between the sidewalk and street
		centerline.
		Domain:
		Parking present – Off-peak only
		Parking present – All Day
		Parking present – Peak only
		Null[DEFAULT]
	material	Primary material used in sidewalk construction.
		Domaine
		Domain:
		Concrete
		Brick
		Null [DEFAULT]
	condition category	Evaluation of the sidewalk condition. Optionally, use condition notes to
		record additional detail. Users should relate the local condition
		categories or measures to the MDOT designated categories.
		Domain:
		Good – 0 to 2 issues
		Fair – 3 to 5 issues
		Poor – 6 or more issues found
		Null [DEFAULT]
	date_of_construction	Stores the year and month that the sidewalk segment was initially
		constructed.
TIER		
THRFF	date_last_condition_score	Date of the most recent update to the sidewalk condition score. This
		facilitates planning for undates
		actitates planning for updates.
		MM/DD/YYYY
	condition notes	Provides a means of supplementing information in the
		condition category field.
		Manual Entry
	cross_slope_category	Either entered by the user or derived (calculated) from
		cross_slope_value. Represents the rate of change in height of the
		sidewalk in the direction perpendicular to direction of travel. Slope is
		defined as rise over run; i.e., 1 inch rise: 12 inch run = 8.33% slope.
		Domain:
		<2% - Acceptable – Below or equal to the SHA Threshold
		 >2% - Unacceptable - Above the threshold Null (DEEALU T)
	oross slope value	Null [DEFAUL1] A continuous variable for the cross slope of sidewalk accment
	cross_stope_value	ה נסותוועסעס אמוזמטני וסו נוופ נוססס סנטאי טו סועפאאמג ספצווופווג.
		Manual Entry
		,

CROSSINGS

Crossings are documented as point events, with attributes that facilitate the modeling of street/centerline crossings that connect sidewalk segments to one another. Crossings are only documented within Tiers



Two and Three. This table also allows jurisdictions to record details about signal infrastructure related to PROWAG. **Table 2** describes crossing attributes by tier.

Table	2:	Crossing	Attributes
		0.000	571111104100

TIER	FIELD	DESCRIPTION
	crossing_type	Indicates the type of crossing.
TIER	crossing_type markings	 Indicates the type of crossing. Domain: Conventional crosswalk Diagonal crosswalk Raised crosswalk Pinch point or yield crosswalk Other Null [DEFAULT] Identifies the type of markings painted on the ground to identify a crosswalk. Some crossings may have no markings or only signage. Domain: No Markings Basic/traverse – two solid transverse lines perpendicular to the direction of vehicle travel Double paired – closely-spaced pairs of lines parallel to the direction of vehicle travel (also known as a "bar pair" or "piano" design) Longitudinal bar – wide, evenly-spaced lines parallel to the direction of vehicle travel (also known as a "continental" or "zebra" design) Perpendicular bar – a combination of transverse and longitudinal markings (also known as a "ladder" design) Diagonal – like perpendicular bar but perpendicular lines are
		Artistic/decorative
		Other Null [DEFAULT]
	ped_cross_signal	Identifies whether or not pedestrian signals are present at the crossing.
		Domain:
		Yes – Pedestrian signal exists
		No – Unsignalized Crossing
	crossing_collection_source	Records the method used to document the crossing (e.g., field
		collection of imagery trace).
		Domain:
		 Imagery
		OpenStreetMap
		Other
		Null [DEFAULT]
	crossing_collection_date	Records the date the crossing was documented, not the date it was added to OMOC.
		MM/DD/YYYY



	ped signal type	Describes the type of pedestrian signal present.
		DOMAIN:
		Pedestrian hybrid beacon
		Pedestrian signal head
		Null [DEFAULT]
	ped_signal_actuation	Indicates whether signal is actuated by a pedestrian input or pre-timed
		signal cycle.
		Domain:
		Pedestrian-actuated
	audible_ped_signal	Notes the presence of an audible indicator of when it is safe to cross.
		Domain:
		Ves
		Null [DEFAULT]
	locator tone	Notes the presence of locator tone. Typically emanating from the push-
		button housing, a push-button locator tone indicates to pedestrians
		that they are expected to push a button to request a pedestrian phase.
TIER		
		Domain:
THREE		Yes
		No No
		Null [DEFAULT]
	vibro_tactile_alert	Indicates if the pedestrian signal button vibrates when it is safe to
		Cross.
		Demains
	ped sig distance	Indicates distance between the pedestrian walk button and curb.
		· · · · · · · · · · · · · · · · · · ·
		Domain:
		Compliant - <=5 feet from curb ramp Left and Right
		Noncompliant - 5+ feet from curb ramp
		Null [DEFAULT]
	signal_button_height	The height of the crossing signal button relative to the sidewalk
		surface.
		Demoint
		Domain:
		Noncompliant - 36+ inches



CURB CUTS

Curb cuts are documented as point features representing a break in the sidewalk. This table allows jurisdictions to define the type and form of curb cuts, providing valuable insight into compliance with ADA guidance. Curb cuts only have Tier Three attributes, described in **Table 3**.

Table 3: Curb Cut Attributes

TIER	FIELD	DESCRIPTION
	cut_presence	Categorical variable that identifies the type of curb cut. The creation of a crossing generates two cut features (one for each sidewalk_id involved in the crossing); where no cut is present (i.e., no ramp to transition grade), set this field to Missing [DEFAULT]. Domain: Missing Present Null [DEFAULT]
	ramp_slope_category	Either be entered by the user or derived (calculated) from ramp_slope_value. Slope is defined as rise over run; i.e., 1 inch rise: 12 inch run = 8.33% slope. Domain: <pre> </pre> Domain: <
TIED	ramp_slope_value	This is a continuous variable for the ramp slope, facilitating a derived (calculated) ramp_slope_category value. Slope is defined as rise over run; i.e., 1 inch rise: 12 inch run = 8.33% slope. Manual Entry
THREE	cut_width_category	Either entered by the user or derived (calculated) from Cut_Width_Value. Ramp_Width_Category is based on accessibility measures established by state and federal regulations. See justification for domains below. Domain: 0 to <4 - Unacceptable 4 to <5 - Acceptable in certain circumstances 5+ - Acceptable Null [DEFAULT]
-	cut_width_value	The width of the cut parallel to the roadway, excluding the curb. This continuous variable indicates the width of the curb cut. A value in this field generates a derived (calculated) Cut_Width_Category value.
	landing_pad	Documents the presence and size of the level area at the top of the ramp where pedestrians can transition to/from the ramp. This field only applies to intersection curb cuts. Domain: None 60"+ - Acceptable <60" - Unacceptable Null [DEFAULT]



	ramp_transition	Indicates if the transition from ramp to crosswalk is smooth or if there is a detectable lip at the ramp gutter. Domain: Yes No Null [DEFAULT]
	dws_present	Indicates the presence of a Detectable Warning Surface (DWS). A DWS is a surface with a distinct difference in color and texture from the surrounding path. A DWS helps people with visual impairments identify the presence of an intersection crossing. Domain: Yes No Null [DEFAULT]
	cut_collection_source	Records the method used to document the curb cut (e.g., field collection or imagery trace). Domain: Field collection Imagery OpenStreetMap Existing data Other Null [DEFAULT]
	cut_collection_date	Records the date the curb cut was documented, not the date it was added to OMOC. MM/DD/YYYY



OBSTRUCTIONS

Obstructions are documented as point events identifying anything that potentially limits the accessibility of progress along a sidewalk segment. Curb cuts only have Tier Three attributes, described in **Table 4**.

Table 4: Obstruction Attributes

TIER	FIELD	DESCRIPTION
	obstruction_location	Categorizes the two possible locations of sidewalk obstructions. Vertical obstruction: An obstruction that does not restrict clearance at ground level (e.g., a hanging sign that restricts lateral clearance to <4 feet within 80" of the sidewalk, measured vertically). Horizontal obstruction: An obstruction that restricts clearance at ground level; this includes abrupt grade changes (e.g., a fire hydrant that restricts lateral clearance to <4 feet; buckling sidewalk resulting in a substantial lip that poses a tripping hazard and could not easily be rolled over). Domain: Vertical obstruction Horizontal obstruction Null IDEFAULTI
IIEK	horiz_obstruction_type	Describes the horizontal obstruction. Categories include common
TUDEE		obstacles that cause sudden changes in the width or slope of the
IUVEE		sidewalk.
		Domain:
		Light/utility Pole
		Bench
		Shelter
		Drainage grate
		Fire hydrant
		Sidewalk cates
		Ruckling or other roughness - e.g. wheeled travel impeded tripping
		hazard
		Other
		Null [DEFAULT]



	vertical_obstruction_type	Describes the vertical obstruction. Categories include common obstacles that cause sudden changes in the height clearance of the sidewalk. Domain: Environmental obstruction - tree branch/vegetation Infrastructure obstruction - signs or poles hanging too low Other Null [DEFAULT]
	permanence	Indicates if the obstruction is permanent or temporary. Permanent obstructions also include those that may be resolved through routine maintenance that has not yet occurred and for which no resolution timeline is known, such as resurfacing disjointed sidewalk segments. Temporary obstructions are those resulting from sudden human or natural intervention that will eventually be cleared on a known timeline, e.g. construction closure, fallen trees, structural failure requiring rebuild. Domain: Permanent Temporary Null [DEFAULT]
	obst_end_date	If an obstruction is temporary, this field is required. Obstructions without a known end date are assumed to be permanent.
	obs_collection_source	Records the method used to document the obstruction (e.g., field collection or imagery trace). Domain: Field collection Imagery OpenStreetMap Existing data Other Null [Default]
	obs_collection_date	Records the date the obstruction was documented, not the date it was added to OMOC.



Access the OMOC Sidewalk Event Editor

To access the OMOC Event Editor, reach out to <u>gis@mdot.maryland.gov</u> to obtain login credentials. Once you have received credentials, use the following link to access the OMOC Event Editor:

https://mdotshaarcgisportal-mdotgov.msappproxy.net/arcgis/home/

Table 5: Accessing the OMOC Event Editor

	STEP DESCRIPTION	IMAGE (IF APPLICABLE)
1	Click on Sign In.	Sign In
		Sign in to SHA's Internal GIS Portal
2	Use the credentials provided by MDOT.	ArcGIS login Username Password Keep me signed in Sign In Forgot password?



ACCESS THE OMOC SIDEWALK EVENT EDITOR

#	STEP DESCRIPTION	IMAGE (IF APPLICABLE)
3	Click on the Sidewalk Event Editor.	Image: Application is for the purposes of maintaining Sidewalk-related event data.
4	Allow permission for the Event Editor to access your ArcGIS Enterprise account information.	Request for Permission Cechard@foursquareitp.com Sign in with another account Sidewalk Event Editor (Developed by MDOT SHA's INTERNAL GIS PORTAL) wants to access your ArcGIS Enterprise account information Cancel



Add Sidewalks to OMOC

Getting Started

The Sidewalks layer documents sidewalks in OMOC; this is the layer you will edit to record additional sidewalks as line events. **Table 6** describes the process for activating this layer. With the layer activated, you will be able to see sidewalks already recorded in OMOC and add new sidewalk events.

Table 6: Turning on the Sidewalks Layer

	STEP DESCRIPTION	IMAGE (IF APPLICABLE)
1	Click on the Map tab.	Map Edit Review
2	Click the Layers button to open the Layers window.	Layers
3	In the Layers window, turn on the Sidewalk layer by checking the checkbox next to the pink line icon. Turn on the Mile Points layer so you can easily determine the direction of centerlines (more on this later). <i>If you plan to use your jurisdiction's existing sidewalk data, anything you submitted to MDOT for reference will be displayed here as well.</i> <i>If you plan to use aerial imagery, zoom in until the imagery appears (extent 1:9,028).</i>	Layers X ✓ Markup ✓ Iabels ✓ Mile Points (100th) ✓ Pedestrian & Bicycle Crossings (External) ✓ Pedestrian & Bicycle Crossings (External) ✓ OHD Pedestrian Facility - Protruding Objects ✓ OHD Pedestrian Facility - Sidewalk Objects ✓ OHD Pedestrian Facility - Sidewalk Objects ✓ OHD Pedestrian Facility - Sidewalks ✓ Routes (IS, MD, US) ✓ Routes (IS, MOC Network ✓ Crossing ✓ Crossing ✓ Crossing ✓ Obstruction ✓ OMOC Network ✓ OMOC Network ✓ Maryland Six Inch Imagery - Cached Map Service ✓ World Navigation Map
4	Click on the Edit tab.	Map Edit Review



ADD SIDEWALKS TO OMOC

#	STEP DESCRIPTION	IMAGE (IF APPLICABLE)
5	Click on the Modify Attribute Sets icon.	Attribute Set: Default Version: SIDEWALK_EDIT.SIDEWALK_EDIT X III X IIIIIIIIIIIIIIIIIIIIIIIIIIIIII
6	Click on Import and add the attribute set, Sidewalk_attributes.rhas , using your system's pop-up file explorer window. If you have not been provided with the .rhas file, please reach out to gis@mdot.maryland.gov with the subject line "Sidewalk Event Editor Attribute Set RHAS File."	Attribute Sets Available Event Layers Available Event Layers Attribute Set Default Image: All Attributes Image: All Attributes
7	The Attribute Sets window should now show three tiers of attributes in the box on the right. Click Save . <i>If you do not changed devices or</i> <i>clear your browser's cache, you</i> <i>will not have to repeat steps 4-8.</i> <i>The sidewalk attribute set will</i> <i>automatically appear.</i>	Attribute Sets Available Event Layers Available Event Layers Attribute Set: Sidewalk Sidewalk Sidewalk Sidewalk Sidewalk Tier 1 attributes Tier 2 attributes Tier 3 attributes Include all required fields for a layer Import Import



Adding a Sidewalk

To document a sidewalk not already recorded in OMOC, you will create a new line event (Table 7).

Table 7: Adding a Sidewalk





ADD SIDEWALKS TO OMOC



STEP DESCRIPTION

IMAGE (IF APPLICABLE)



The segment you clicked will highlight (bright blue in the example image).

When prompted to choose a route in cases where two routes exist on the same path (note: this will not always happen), choose the **Route ID** with a cardinality (sixth-tolast-digit) of 1. See **Centerline Overview** later in this guide for more information.

4

If you are not prompted to reconcile in a Locks window, skip to **Step 6**.

If you are prompted to reconcile in a Locks window, click **OK** and continue to **Step 5**.

> Route: <u>15000CO04122--1----</u>show Route: <u>15000CO04122--2----</u>show

Locks

A reconcile with version RH.QA/QC is required to acquire locks. Please reconcile and try again.



ОK

	STEP DESCRIPTION	IMAGE (IF APPLICABLE)
5	Click the Reconcile and Post button in the Edit tab.	Map Edit Review Image: Select Rectangle Versioning Edit Review
	The Reconcile and Post window will appear. Ensure the Target Version is set to RH. QA/QC and click Reconcile .	Reconcile and Post X Target Version: RH.QA/QC Release all locks on post Reconcile Reconcile and Post



ADD SIDEWALKS TO OMOC

STEP DESCRIPTION	IMAGE (IF APPLICABLE)
Determine which portions of the street feature	For sidewalks that span the entire segment on both sides of the road:
sidewalks. Assuming an intersection is usable by pedestrians, the sidewalk event should continue through the intersection uninterrupted.	To Method: OMOC Network Measure: Use the Route Start Use the Route End
If the sidewalks are fragmented along the road segment or there are multiple centerlines, skip to Step 7 .	0.05 S 0.07 S 0.08 S 0.05 3 0.12 0.01 S
If sidewalks span the entire road segment on both sides and there is only one centerline on the road, select Use the Route Start as the From Measure . It will appear as a green X. Then, select Use the Route End as the To Measure. It will appear as a red X.	
After this step, continue to Step 8 . Skip Step 7 , which only addresses fragmented sidewalks along a route.	0.09 S 0.09 S 0.1 S 0.09 E 0.09 E 0.12 S 0.13 S



6

If sidewalks span the entire road segment on both sides and there is only one centerline on the road, go back to **Step 6** and skip this step.

If the sidewalks are fragmented along the road segment or there is more than one centerline on the road, be sure to have toggled the Mile Points layer (Step 3 of **Getting Started**). You will need to be sure you are adding the **From Measure** at a lower mile point than the **To Measure**.

Next, open the **Snapping Options** window in the **Edit Events** tab. Toggle on snapping for the **Vertex** and **End** of the **OMOC Network**, so that your selections match up with the road network. Click **OK**.

7

Click **Enable Snapping** to turn on the snapping you just configured.

In the Add Linear Events window, click on the Select button next to the From Measure field and select the point on the road centerline where the sidewalk begins. It will appear as a green X. Similarly, click on the Select button next to the To Measure field and select the point on the For sidewalks that are not contiguous: ¥... Attribute Set: Default + Version: SIDEWALK_EDIT.SIDEWALK_EDIT Event X 🖃 🏹 🗖 📠 🚎 Replacement Edit Events **Snapping Options** - X +Tolerance (pixels): 15 Choose one map layer to snap to and the snap type(s) for that layer: Vertex Edge End Layer Combined_Sidewalks_195 Combined_Sidewalks_355 0 Crossing Curb Cut \Box O0 Demographics_Employment 0 MoCo_Sidewalks_195 MoCo_Sidewalks_355 0 0 Obstruction \bigcirc OMOC Network ~ ~ 0 In OSM_Sidewalks_195 Rockville_Sidewalks_355 0 \cap E Sidewalk ОΚ Cancel

In the Linear Events window:

- From -			
Method:	OMOC Network	•	
Measure:		👻 Miles 🔻 🔣 🧕	
— To ——			
Method:	OMOC Network	-	
Measure:		🕶 Miles 👻 🚯 🔍	



ADD SIDEWALKS TO OMOC

#	STEP DESCRIPTION	IMAGE (IF APPLICABLE)
	road centerline where the sidewalk ends. It will appear as a red X.	0.17 N
	If multiple centerlines merge into one, end the sidewalk event at that merge point. If a sidewalk ends at an intersection, ensure the event starts/ends at the point where the centerlines intersect (Illustrated by the red X in the example) If the sidewalk continues after the intersection, and the intersection is navigable by pedestrians, continue the sidewalk event through the intersection uninterrupted.	
8	In the Add Linear Events window, ensure the Start Date is today's date, then click Next . Leave all checkboxes unchecked.	Dates Start Date: 7/4/2024 Use route start date End Date: Use route end date Retire overlaps Merge coincident events Prevent measures not on route Save events to dominant routes Next >



ADD SIDEWALKS TO OMOC

#	STEP DESCRIPTION	IMAGE (IF	APPLICABLE)		
9	Assuming the sidewalk is adjacent to the roadway, set the Sidewalk Type to SIDEWALK ADJACENT TO ROADWAY.	Add Linear Eve	APPLICADLE) Ints Tier 2 attributes Tie Tibute ewalk Type e of Roadway ational ID ewalk Collection Source ewalk Collection Date tus	ar 3 attributes Value anull> SIDEWALK ADJACENT TO PUBLICLY-ACCESSIBLE SI anull> anull	ROADWAY DEWALK NOT ADJACENT TO A ROADWAY



STEP DESCRIPTION

Define the side of the road your current sidewalk segment(s) is/are on.

If there are multiple centerlines (e.g., a divided highway with a median), only include the side of the road centerline where the sidewalk is directly next to the centerline you selected.

10

The example here has two centerlines. Each centerline has a sidewalk on one side only. See **Centerline Overview** later in this guide for more information.

Reminder: In determining the side, imagine you are walking from the green start X to the red end X; what side is the sidewalk on?

IMAGE (IF APPLICABLE)

Tier 1	attributes	Tier 2 attributes	Tier 3 attributes
	Attribu	ite	Value
~	Sidewa	alk Type	SIDEWALK ADJACENT TO ROADWAY
	Side o	f Roadway	<null></null>
Relational Sidewalk 0		nal ID	<null></null>
		alk Collection Sour	ce LEFT
	Sidewalk Collection Date		LEFT AND RIGHT
	Status		SHARED-USE PATH RIGHT









ADD SIDEWALKS TO OMOC

#	STEP DESCRIPTION	IMAGE (IF APPLICABLE)
10	When you are done with a batch of additions, be sure to navigate to the Edit tab and select Reconcile and Post to Target Version RH. QA/QC.	Map Edit Review Image: Crossing Image: Crossing Image: Crossing Reconcile Select Rectangle Image: Crossing Versioning Selection Image: Crossing Image: Crossing Reconcile and Post Image: Crossing Image: Crossing Image: Crossing Reconcile and Post Image: Crossing Image: Crossing Image: Crossing Image: Crossing Reconcile and Post Image: Crossing Ima



Add a Point Event

Unlike sidewalks, events like crossings, curb cuts, and obstructions are to be entered as points rather than as lines. **Table 8** describes the process for adding point events using the OMOC Event Editor.

Table 8: Adding a Point Event

	STEP DESCRIPTION	IMAGE (IF APPLICABLE)
1	Click on the Edit tab.	Map Edit Review
2	Click the Point Events button.	Point Events
3	The Add Point Events window will open. To select a segment of the centerline you would like to add an event, click on the Select button next to the Route ID field and click on the centerline where you plan to document the event. One crossing should be entered for each centerline crossed (i.e., one crosswalk point for a single centerline, two for a double centerline).	Add Point Events New Edit Network: OMOC Network Route ID: Location Method: OMOC Network Method: Outes Start Date: Save event measures not on route Save event to dominant route Next >







ADD A POINT EVENT

#	STEP DESCRIPTION	IMAGE (IF APPLICABLE)
#	Click the Select button next to the Measure field and then click on the location of the point event. It will appear as a red X.	Add Point Events New Edit Network: OMOC Network Image: Image
6	To add a crosswalk, click the centerline where it is intersected by the crosswalk. Remember to add a point for each crosswalk at the intersection.	Recent and Andrew Andre



ADD A POINT EVENT



Edit Existing Events

In addition to allowing users to record pedestrian infrastructure, the OMOC Sidewalk Event Editor facilitates edits to existing sidewalks, crossings, curb cuts, and obstructions. The following describes the steps to split a sidewalk and edit event attributes.

Split a Line

To ensure the accuracy of sidewalk attributes over time, you may need to split the line into smaller segments (e.g., splitting a large sidewalk line to facilitate the documentation of a widening project along a smaller section). Use the **Split Linear Events** button in the **Edit** tab to open the **Split Linear Events** window (**Figure 1**) and select both the **Route** and the **Measure** that will serve as the splitting point between your two new line events. It may be helpful to turn on **Mile Points** in the **Layers** window to understand which line event is which. **Event 1** will start at the lowest measure and end at the measure you used to split the line, while **Event 2** will start at the measure you used to split the line and end at the highest measure.

You can make changes to the two new events before saving. As always, **Reconcile and Post** after you are done with your batch of edits for the day.

- Split Location							
Event Laver							
Sidewalk							
Network							
OMOC Network							
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leasure (miles)							
1.0042 143		34					
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Split Result							
test Data							
Start Date							
2/30/2024							
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3/30/2024 Use route star	rt date	•					
3/30/2024 Use route star	rt date	•					
3/30/2024 Use route star	rt date	v					
3/30/2024 Use route star nd Date Use route end	rt date	Y					
3/30/2024 Use route star and Date Use route end Attribute	rt date	• • Event 2					
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an Date 300/2024 Use route stat ind Date Use route end Attribute Sidewalk Type Side of Roadway Relational ID Sidewalk	I date Event 1 SIDEWALK ADJACENT TO ROADWAY LEFT AND RIGHT <null></null>	Event 2 SIDEWALK ADJACENT TO ROADWAY LEFT AND RIGHT 					
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Figure 1: Split Events Window

For more information on splitting lines, click the link below:

https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/splitting-events.htm



Edit Event Attributes

To edit a point or linear event's attributes, toggle the **Layer** in the **Selection** pane of the **Edit** tab (**Figure 2**) to the type of event you would like to edit.

Figure 2: Selection Pane



Select the event on the map using the button and clicking on the event you wish to edit. If you would prefer to select many features or use another select tool, click the arrow under the **Point** tool to change your selection method (e.g., "Rectangle"). A table will appear on your screen with the selected events, and you can edit fields just like you would an Excel spreadsheet. To delete a record or several

records, select the row (or several rows by holding **ctrl**) and then click \checkmark to delete events.

After making edits, click **Save**. When the **Save Options** window (**Figure 3**) appears, consider the purpose of your edits. If you were correcting an error in the data, do not check any boxes. If you are updating an event to reflect a real change in the sidewalk or other event, check **Retire edited events and create new events effective** the date the change took place (i.e., the date of the infrastructure modification, not the date of OMOC revisions).

Figure 3: Save Options Window

Save Options
Retire edited events and create new events effective Today
Merge coincident events with the same attributes that are edited
Note: The defaults for these options can be changed in the Save options tab of Table Properties.
OK Cancel

As always, **Reconcile and Post** after you are done with your batch of edits.

For more information, click the link below:

https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/editing-events-in-the-selection-table.htm



Centerline Overview

OMOC documents roadway characteristics, including sidewalks, relative to their location along centerlines. This section provides context on centerline aspects that impact how users should enter data about sidewalks, crossings, and other pedestrian infrastructure.

Undivided Routes

Routes can accommodate two-way traffic but have only one "visible" line, which requires the user to pick one of two features (i.e., routes) that follow the same geometry. In cases like **Figure 4** below, both features (i.e., directions of travel) share the same geometry, requiring users to select one before documenting pedestrian infrastructure.

Figure 4: Undivided Routes



In this case, users should always choose the route with a cardinality of 1 (see **Figure 5** for an illustration of how to identify cardinality) and avoid adding attributes to other routes that share its geometry. In **Figure 5**, the route ID of 01000IS00068--1---- has a cardinality of 1 and should be the route to contain all attributes. *Following this guidance, non-inventory route sections will not contain sidewalk data*.

Figure 5: Route ID Structure

County	Municipality	Prefix	Route Number	Suffix	Cardinality	Exit	Ramp
01	000	IS	00068		1		



Divided Routes

Divided routes are physically divided along the section of road, resulting in two features (i.e., no shared geometry). As an example, **Figure 6** shows a highway divided by a median. In this case, users should add sidewalk attributes to the nearest centerline. In this example, the sidewalks on the right side of the median should be assigned to the route on right (i.e., assign the sidewalk identified by the red arrow to the centerline identified by the red arrow). Similarly, only the sidewalks on the left side of the median should be assigned to the route on left.

Figure 6: Divided Routes



Appendix: OMOC Event Editor Quick Reference

This section provides additional instructions for navigating the OMOC Sidewalk Event Editor and customizing it for your specific use case. The OMOC Sidewalk Event Editor features three tabbed groupings of functionality: Map, Edit, and Review. A description of the functionality is provided for reference.

Map Tab

The Map tab (Figure 7) includes Navigation, Find, Contents, and Identify tools.





NAVIGATION

The following **Navigation** menu (**Figure 8**) options are available for use in Event Editor. Note: the mouse wheel also controls the ability to zoom in/out.

Figure 8: Navigation Menu



- Pan
- Zoom to Initial Extent
- Zoom to Previous Extent
- Zoom to Next Extent
- Zoom In
- Zoom Out
- Set the Map Scale (select a preset zoom level, or enter a user-defined value)

FIND

The Find menu (Figure 9) options include: Find Route and Find Address.

Figure 9: Find Menu

\bigcirc	Network (LRM):		
Q	OMOC_NETWORK	•	Å.
Find			
Route	Find		

Find Route

Event Editor provides the ability to enter a Route ID on a specified network and **Find Route** will return a listing of routes. If a given route on the list is clicked, Event Editor will present the following options:

- Zoom to Route
- Zoom to Measure
- Flash Route
- Add Linear Events
 - Opens the Add Linear Events window for editing, and zooms to that route
- Check Events
 - Opens the Check Events window for QA, and zooms to that route

https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/searching-for-routes.htm



Find Address

To find an address, toggle the dropdown under Find Route and select **Find Address**. Then, type the desired address.

The Find Address tool provides the ability to search for an address. After entering an address, Event Editor will return a set of potential matches, that when clicked will zoom to that location on the map.

https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/searching-for-addresses-and-places.htm

CONTENTS

The Contents menu (Figure 10) options include: Layers, Basemap, and View Date.

Figure 10: Contents Menu



Layers

Event Editor provides the ability to view a map legend depicting layer symbology and toggle the available **Layers** on and off. Layers include reference sidewalk layers provided by local jurisdictions, OMOC centerlines, centerline segments with sidewalk attributes, and pedestrian point events (e.g., curb cuts or crossings) recorded.

Basemap

Event Editor provides the ability to change the background **Basemap** that is viewable in the map. Several Esri-provided basemaps are available, including Imagery, Streets, Topographic, etc.

At a zoomed-in extent(1:9,028), the basemap will automatically toggle to Maryland's aerial imagery (Figure 7) for easy reference when tagging sidewalks on the centerline.

Figure 11: Maryland's Aerial Imagery



https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/changing-the-basemap.htm



View Date

Event Editor provides the ability to change the temporal view of the network and event data, so long as the dates on the data support this function. This allows for the adding of events, editing of events and querying of events and routes relative to the current date, historic date, or future date.

Note: time-specific (i.e., 11:23 a.m.) edits are not supported in Event Editor. All edits are configured to be time stamped at 12:00:00am.

https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/changing-the-time-view.htm

IDENTIFY

The Identify menu (Figure 12) options includes: Identify Features and Identify Route Locations.

Figure 12: Identify Menu



Identify Features

Event Editor allows users to click on any dynamic layer in the map and return a listing of attributes for that feature in a window with **Identify Features**.

https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/identifying-features.htm

Identify Route Locations

The **Identify Route Locations** tool returns the feature attribute information as well as the measure information when the feature is part of a Linear Referencing System (LRS) network.

https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/identifying-features.htm



Edit Tab

The Edit tab (Figure 13) includes Versioning, Selection, and Edit Events tools.

Figure 13: Edit Tab



VERSIONING

Use the **Reconcile & Post** function (**Figure 14**) to make sure you have the most up-to-date data from other users' work (**Reconcile**) and make sure all other users have the most up-to-date data from your work (**Reconcile & Post**). In most cases, you will **Reconcile & Post** to the **Target Version: RH. QA/QC**. Releasing all **Locks** allows users to make any necessary changes to the line segments your edit session may have previously locked.

Figure 14: Reconcile and Post Dialog



https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/reconciling-and-posting-eventdata.htm

SELECTION

The **Select** and **Rectangle Select** functions make it easy to select the line segments you wish to edit or learn more about. Click on the line segment you wish to select using the **Select** function, or use the **Rectangle Select** tool to select several segments at once. Be sure you are targeting the desired **Active Layer**.



EDIT EVENTS

Select **Point Events** to add point events (i.e., Crossings, Curb Cuts, Obstructions) and select **Line Events** to add line events (i.e., Sidewalks) to the network. For step-by-step instructions, reference **Add Sidewalks to OMOC** or **Add a Point Event**.

If you have been provided a set of fields organized differently than the default (e.g., if you need to prioritize certain fields and show them first every time you add an event), use 📾 to import the file you were provided then change the **Attribute Set** to your preferred settings.

Use X to **Split Linear Events**. Reference the **Split a Line** section in this document for more information.

https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/splitting-events.htm

Use ^{*} to **Enable Snapping**, so that you can more easily add events without gaps in the network. Edit **Snapping Options** using [•] . In most cases, you will want to snap to the OMOC Network in the **Snapping Options** window (**Figure 15**).

- X

Figure 15: Snapping Options

Snapping Options
Tolerance (pixels): 15

Choose one map layer to snap to and the snap type(s) for that layer:





Review Tab

The **Review** tab (**Figure 16**) includes **Conflict Prevention**, **Markup**, and **Inquiry** tools. This tab is not necessary for adding basic sidewalk attributes, but the guidance for **Review** tools is included here for reference.

Figure 16: Review Tab



QC (QUALITY CONTROL)

Use Check Events to check line segments for gaps, overlaps, and invalid measures.

https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/detecting-gaps-overlaps-and-invalid-measures.htm

CONFLICT PREVENTION

Use the **Locks** function to view all the segments currently locked (by you and other users). This can be helpful when the segment you wish to edit is currently locked.

https://enterprise.arcgis.com/en/roads-highways/latest/event-editor/conflict-prevention-in-event-editor.htm

MARKUP

Use the **Markup** functions to leave notes about your work so you can pick up where you left off or note a concern about data so you can verify validity.

INQUIRY

Use the **Measure** function to approximately measure events and other layers on the map for reference while you review your work.

