

Metadata for the

MnModel Phase 4

ARCHSITE

Developed by

Minnesota Department of Transportation (MnDOT)

These metadata were created using the [Minnesota Geographic Metadata Guidelines](#)

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Section 1 Identification Information

<i>Originator</i>	Minnesota State Historic Preservation Office (SHPO) Minnesota Office of the State Archaeologist (OSA) State Historic Preservation Office (SHPO) United States Forest Service (USFS)
<i>Title</i>	ARCHSITE
<i>Abstract</i>	ARCHSITE is a polygon feature class storing information unique to each recorded pre-contact archaeological site in Minnesota.
<i>Purpose</i>	Data input(s) for MnModel Phase 4.
<i>Time Period of Content Date</i>	1987-2017

Currentness Reference Dates of sites mapped. Archaeological site information was last updated by new data from SHPO and OSA in March, 2015; updates from MnDOT include periodic site polygons from consultant submissions until 2016; USFS data were current as of May, 2015.

Progress Complete

Maintenance and Update Frequency MnDOT has no plans to update these data. With the exception of the USFS data, all data have been turned over to OSA for maintenance and updating.

Spatial Extent of Data Statewide

Bounding Coordinates E = -89
W = -97.5
N = 49.5
S = 43

Place Minnesota

Keywords

Theme MnModel, archaeology, prehistoric, pre-contact

Keywords

Theme None

Keyword

Thesaurus

Access Constraints These data are not available to the general public. The SHPO and OSA data only are available to qualified archaeologists and tribal preservation staff via the Minnesota Office of the State Archaeologist (OSA) portal.

Use Constraints By accepting these data, the user agrees not to transmit these data or provide access to it or any part of it to another party.

Per a Memorandum of Understanding (MOU) between MnDOT and USFS (FS Agreement No. 15-MU-11090300-003), all federal site data must be erased in its entirety from all State-owned hard drives and/or locations of database information by June 30, 2019. These data have now been removed from this dataset, but are documented here as they were used for development of MnModel Phase 4 models.

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Browse None available

Graphic File Name

Browse Graphic File Description

Associated Data Sets ARCHSURV, SITESAMP, SURVSAMP

Section 2 Data Quality Information - - - - - [Go back to top](#)

Attribute Accuracy Varies. A qualitative locational confidence value is assigned for each site polygon/record in the database.

Logical Consistency

Completeness Incomplete. All reliably known pre-contact period sites from the SHPO and OSA database at the time of completion are included.

Horizontal Positional Accuracy Variable. At their least accurate, the data are based upon mapping of sites from USGS topo maps. At their most accurate, the data are based upon points collected using GPS units operating at a sub-meter level of accuracy. SHPO and OSA site polygons were georeferenced and digitized from a variety of hardcopy files including both site forms and USGS 7.5 quadrangle maps. Field archaeologists varied in the accuracy with which they recorded these coordinates. SNF point data were buffered by a radius of 60 meters in order to generate appendable polygons. This radius value is based on the average area of a CNF archaeological site polygon. Based on multiple database fields, the LOCCONF field value qualitatively rates the horizontal positional accuracy for each site polygon.

Vertical Positional Accuracy n/a

Lineage MnDOT began collecting archaeological site shapefiles from Contractors in 2000. In 2012, for MnModel Phase 4, contractors digitized sites mapped to USGS topo sheets by the SHPO office from site forms. This was followed by a project to digitize all remaining site boundaries from site

forms, most of which were on file at SHPO and the remainder were found at OSA. This database incorporates all available information from records at both the Minnesota Historic Preservation Office and the Minnesota Office of the State Archaeologist. USFS sites data from both Chippewa National Forest (CNF) and Superior National Forest (SNF) were subsequently appended to the SHPO/OSA site database.

Specific modeling fields pertaining to site description, function, and archaeological tradition were created and populated based on the recorded database information. Only selected fields are used from the original merged database.

Source Scale 1:24,000
Denominator

Section 3 Spatial Data Organization Information - - - - - [Go back to top](#)

Native Data Set Environment ArcMap 10.3

Geographic Reference for Tabular Data none

Spatial Object Type Vector

Vendor Specific Object Types Polygon

Tiling Scheme

Section 4 Spatial Reference Information - - - - - [Go back to top](#)

Horizontal Coordinate Scheme UTM

Ellipsoid GRS80

Horizontal Datum NAD83

Horizontal Units Meters

Distance Resolution

Cell Width

Cell Height

UTM Zone Number 15E

Section 5 Entity and Attribute Information - - - - - [Go back to top](#)

Entity and Attribute Overview [Detailed Attribute Metadata Table](#)

Field, type, width, definition

Entity and Attribute Detailed Citation

Section 6 Distribution Information - - - - - [Go back to top](#)

Publisher Minnesota Department of Transportation (MnDOT)

Publication Date

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Distributor's Data Set Identifier ARCHSITE

Distribution Liability As specified by MnDOT and MnModel data disclaimer(s).

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representation or warranties, express or implied, with respect to the reuse of data provided herewith, regardless of its format or the means of its transmission. There is no guarantee or representation to the user as to the accuracy, currency, suitability, or reliability of this data for any purpose. The user accepts the data 'as is', and assumes all risks associated with its use. By accepting this data, the user agrees not to transmit this data or provide access to it or any part of it to another party unless the user shall include with the data a copy of this disclaimer. The Minnesota Department of Transportation assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data.

*Transfer
Format Name* ArcMap

*Transfer
Format
Version
Number* 10.3

Transfer Size 32 MB

*Ordering
Instructions* Not available for distribution

*Online
Linkage* Archaeological site data are available only to qualified archaeologists and tribal preservation staff through the Minnesota Office of the State Archaeologist (OSA) Portal.

Section 7 Metadata Reference Information - - - - - [Go back to top](#)

*Metadata
Date* 9/26/2017

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*Metadata
Standard
Name* Minnesota Geographic Metadata Guidelines

*Metadata
Standard
Version* 1.2

*Metadata
Standard
Online
Linkage*

This page last updated 5/6/2019.

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Detailed Attribute Metadata Table

Variable Name	Type	Description	Source	Valid Values
FUNCTION	String	Site evidence and/or inferred function; more than one function may occupy the field, with function codes separated by commas and no spaces	Office of the State Archaeologist (OSA), United States Forest Service (USFS)	EW = Earthwork MOUND = Mound RART = Rock Art RALN = Rock Alignment RSHLTR = Rock Shelter QUARRY = Quarry KILL = Animal Kill BUTCHERING = Animal Butchering PORTAGE = Portage TRAIL = Trail BATTLE = Battleground HAB = Habitation SA = Single Artifact LS = Lithic Scatter TEMPCAMP = Temporary Camp BASECAMP = Base Camp LITHIC_WS = Lithic Workshop FISHING = Fishing RICING = Wild Rice Gathering SUGARING = Maple Sugar Gathering CACHE = Cache TRADING_POST = Trading Post SM = Shell Middel GATHERING = Plant Gathering GARDENING = Gardening
DB_SOURCE	String	Source Agency of Data	Office of the State Archaeologist (OSA), United States Forest Service (USFS)	OSA USFS
SITENUM	String	OSA site number	OSA	21XXnnnn where 21 is the state code, XX is the two-letter county code, and nnnn is the four digit sequence number.
SITENAME	String	OSA site name	OSA	Varied text
FSSITENUMB	String	USFS site number	USFS	11-digit number assigned by USFS
FSSITENAME	String	USFS site name	USFS	Varied text
COUNTY	String	County name	State of Minnesota	Names of 87 MN counties
QAQCBY	String	Agency/consultant performing quality control	Office of the State Archaeologist (OSA), United States Forest Service (USFS)	HDR MnDOT ProWest USFS
ScannedBy	String	Agency/consultant responsible for scanning hardcopy forms	MnDOT	Contractor ProWest Summit
DigitizedB	String	Agency/consultant responsible for digitizing the site location	MnDOT	Contractor DNR MnDOT ProWest Summit USFS

Variable Name	Type	Description	Source	Valid Values
GISSource	String	Source of digital site data or type of hardcopy document from which it was digitized	OSA, State Historic Preservation Office (SHPO), USFS, Minnesota Department of Natural Resources (MN DNR), MnDOT	Contractor Survey = Submitted to MnDOT in digital format by contractor MN DNR = Provided to MnDOT in digital format by DNR Report = Digitized from a survey report SHPO Topo = Digitized from topographic maps on file at SHPO SHPO UTM = GIS point created from UTM coordinate in SHPO database SiteForm = Digitized from original Site Form SiteUpdate = Digitized from Updated Site Form Uncertain = Source not known USFS = Provided to MnDOT in digital form by USFS
EW	Long	Earthwork	OSA, USFS	0 – No 1 – Yes
MOUND	Long	Mound	OSA, USFS	0 – No 1 – Yes
RART	Long	Sacred marking (rock art)	OSA, USFS	0 – No 1 – Yes
RALN	Long	Rock alignment	OSA, USFS	0 – No 1 – Yes
RSHLTR	Long	Rock shelter	OSA, USFS	0 – No 1 – Yes
QUARRY	Long	Quarry	OSA, USFS	0 – No 1 – Yes
KILL	Long	Animal kill site (e.g. bison, elk)	OSA, USFS	0 – No 1 – Yes
BUTCHERING	Long	Animal butchering site	OSA, USFS	0 – No 1 – Yes
PORTAGE	Long	Overland portage	OSA, USFS	0 – No 1 – Yes
TRAIL	Long	Trail, pathway, etc.	OSA, USFS	0 – No 1 – Yes
BATTLE	Long	Battleground area	OSA, USFS	0 – No 1 – Yes
HAB	Long	Habitation area	OSA, USFS	0 – No 1 – Yes
SA	Long	Single artifact (e.g. lone arrowhead, pottery sherd)	OSA, USFS	0 – No 1 – Yes
LS	Long	Lithic scatter	OSA, USFS	0 – No 1 – Yes
TEMPCAMP	Long	Temporary camp	OSA, USFS	0 – No 1 – Yes
BASECAMP	Long	Base camp	OSA, USFS	0 – No 1 – Yes
LITHIC_WS	Long	Lithic workshop	OSA, USFS	0 – No 1 – Yes
FISHING	Long	Fishing location	OSA, USFS	0 – No 1 – Yes
RICING	Long	Ricing location	OSA, USFS	0 – No 1 – Yes
SUGARING	Long	Sugaring location	OSA, USFS	0 – No 1 – Yes

Variable Name	Type	Description	Source	Valid Values
CACHE	Long	Cache spot	OSA, USFS	0 – No 1 – Yes
TRADING POST	Long	Trading post location	OSA, USFS	0 – No 1 – Yes
SM	Long	Shell midden	OSA, USFS	0 – No 1 – Yes
GATHERING	Long	Resource gathering location	OSA, USFS	0 – No 1 – Yes
GARDENING	Long	Gardening location	OSA, USFS	0 – No 1 – Yes
NUM_ARTIFACTCAT	Long	Total number/tally of individual artifact categories recorded at the site (i.e. flora, fauna, ceramics, lithic or exotic materials)	OSA, USFS	0 1 2 3 4 5
NUM_SITE FUNCT	Long	Total number/tally of individual site functions recorded at the site (i.e. a tally of fields ranging from EW to GARDENING which have a value of 1). This value gauges the site's diversity of use.	OSA, USFS	0 1 2 3 4 5 6
CULTURAL	Long	Total number/tally of cultural functions recorded at each site (i.e. if MORT=1, MOUND=1, RART=1, or RALN=1).	OSA, USFS	0 1 2 3 4
ECONOMIC	Long	Total number/tally of economic functions recorded at each site (i.e. if QUARRY=1, KILL=1, BUTCHERING=1, PORTAGE=1, TRAIL=1, HAB=1, AS=1, LS=1, TEMPCAMP=1, BASECAMP=1, LITHIC_WS=1, FISHING=1, RICING=1, SUGARING=1, CACHE=1, TRADING POST=1, SM=1, GATHERING=1, or GARDENING=1).	OSA, USFS	0 1 2 3 4 5
ANOMALY	Long	Anomalous site (i.e. BATTLE=1 or SA=1)	OSA, USFS	0 - No 1 - Yes
PL_TRAD	Long	Recorded as Paleo tradition site	OSA, USFS	0 - No 1 - Yes
AR_TRAD	Long	Recorded as Archaic tradition site	OSA, USFS	0 - No 1 - Yes

Variable Name	Type	Description	Source	Valid Values
WLD_TRAD	Long	Recorded as Woodland tradition site	OSA, USFS	0 - No 1 - Yes
PV_TRAD	Long	Recorded as Plains Valley tradition site	OSA, USFS	0 - No 1 - Yes
MS_TRAD	Long	Recorded as Mississippian tradition site	OSA, USFS	0 - No 1 - Yes
ONTA_TRAD	Long	Recorded as Oneota tradition site	OSA, USFS	0 - No 1 - Yes
NUM_TRADITIONS	Long	Total number/tally of archaeological traditions recorded at each site. This value gauges its level of use over time (i.e. if PL_TRAD=1, AR_TRAD=1, WLD_TRAD=1, PV_TRAD, MS_TRAD, or ONTA_TRAD=1).	OSA, USFS	0 1 2 3 4 5
CERSITE	Long	Ceramic evidence was recorded at the site	OSA, USFS	0 - No 1 - Yes
MORT	Long	Mortuary site	OSA, USFS	0 - No 1 - Yes
AS	Long	Artifact scatter	OSA, USFS	0 - No 1 - Yes
GROUP_1	Short	All sites except SA=1 or ANOMALY=1. This group samples the entire archaeological site population EXCEPT single artifact finds and other anomalous sites such as battlegrounds. This is the largest population of sites that may be modeled. As such, it combines sites for different types of activities and from different time periods. For this reason, models created using this group may be imprecise.	MnDOT	0 - No 1 - Yes

Variable Name	Type	Description	Source	Valid Values
GROUP_2	Short	HAB=1 or AS=1. These are recorded habitation sites and surface artifact scatters (e.g. both pottery and lithics), which may indicate underground features such as storage pits. This group (all those following) serve as a test combination of recorded site type descriptions/functions for site prediction modeling. The effectiveness of using this specific combination of site descriptions/functions will be subsequently assessed by comparing its output with recorded and anticipated site locations.	MnDOT	0 - No 1 - Yes
GROUP_3	Short	HAB=1 or CERSITE=1. This test combination includes both habitations and sites where ceramic evidence was found, which presumably indicates prolonged habitation or intensified economic activity.	MnDOT	0 - No 1 - Yes
GROUP_4	Short	HAB=1 or AS=1 or LS=1. This test combination includes habitations, artifact scatters as well as lithic scatters. Lithic scatters may also indicate underground features, a workshop, rest area, etc.	MnDOT	0 - No 1 - Yes
GROUP_5	Short	AS=1 or LS=1 or EW=1. This test combination includes artifact scatters, lithic scatters, and earthworks (burial mound, fortification, ricing pit) which indicate long-term habitation and/or the site is culturally significant and in all likelihood re-visited.	MnDOT	0 - No 1 - Yes

Variable Name	Type	Description	Source	Valid Values
GROUP_6	Short	AS=1 or EW=1 or CERSITE=1. This test combination includes artifact scatters, earthworks, and ceramic evidence. All of these site types/function indicate possible long-term village occupation or at least extended habitation.	MnDOT	0 - No 1 - Yes
GROUP_7	Short	AS=1 or LS=1 or EW=1 or CERSITE=1. This test combination includes artifact scatters, lithic scatters, earthworks, and ceramic evidence. All of these site types/function possibly indicate village-type activity.	MnDOT	0 - No 1 - Yes
GROUP_8	Short	HAB=1 or AS=1 or LS=1 or EW=1. This test combination includes habitations, artifact scatters, lithic scatters, and earthworks.	MnDOT	0 - No 1 - Yes
GROUP_9	Short	HAB=1 or AS=1 or EW=1 or CERSITE=1. This test combination includes habitation, artifact scatters, earthworks, and ceramic evidence.	MnDOT	0 - No 1 - Yes
GROUP_10	Short	HAB=1 or AS=1 or LS=1 or CERSITE=1. This test combination includes habitations, artifact scatters, lithic scatters, and ceramic evidence.	MnDOT	0 - No 1 - Yes
GROUP_11	Short	HAB=1 or AS=1 or LS=1 or EW=1 or CERSITE=1. This test combination includes habitation, artifact scatters, lithic scatters, earthworks, and ceramic evidence.	MnDOT	0 - No 1 - Yes

Variable Name	Type	Description	Source	Valid Values
PERIOD_1	Short	PL_TRAD=1 or AR_TRAD=1. This test combination includes only Paleo and Archaic sites, which are attributed with a hunter/gatherer lifeway (all sites older than 1,000 BC). After the Archaic period ends, we are able to observe more sedentary types of village life, intensified agricultural practices, mound building, intensified regional trade, etc.	MnDOT	0 - No 1 - Yes
PERIOD_2	Short	WLD_TRAD=1 or PV_TRAD=1 or MS_TRAD=1 or ONTA_TRAD or CERSITE=1. This test combination includes sites from the Woodland, Plains Valley, Mississippian, and Oneota traditions in addition to sites with ceramic evidence (sites generally post-dating 1,000 BC). These traditions all made pottery, built mounds, traded regionally, their diets consisted of resources obtained through hunting-fishing-gathering-horticulture, and social interaction across Minnesota intensifies. Populations increase and cultural centers appear across Minnesota.	MnDOT	0 - No 1 - Yes
JOIN_ID	Long	Attribute join field	MnDOT	

Variable Name	Type	Description	Source	Valid Values
LOCCONF	Short	Location confidence value based on existing qualitative database fields and LOCCONF_F2 Decision Table. Note: the original LOCCONF value utilized in the decision table was assigned by the Minnesota Historic Preservation Office.	MnDOT	5 = Very High 4 = High 3 = Moderate 2 = Low 1 = Very Low See LOCCONF Decision Table.

LOCCONF Decision Table

QUERY	LOCCONF
GISSource = 'Contractor Survey'	5
GISSource <> 'Contractor Survey' AND LOCCONF = 1	5
GISSource <> 'Contractor Survey' AND LOCCONF = 2	4
GISSource <> 'Contractor Survey' AND LOCCONF = 3	3
GISSource <> 'Contractor Survey' AND LOCCONF = 4	2
GISSource <> 'Contractor Survey' AND LOCCONF = 5	1
GISSource <> 'Contractor Survey' AND (LOCCONF IS NULL OR LOCCONF = '') AND (GISSource = 'SiteForm' OR GISSource = 'SiteUpdate')	5
GISSource <> 'Contractor Survey' AND LOCCONF IS NULL AND GISSource = 'SHPO Topo'	4
GISSource = 'SHPO UTM' (<i>overrides LOCCONF</i>)	3
DB_SOURCE = 'USFS'	5