# OJT Training Module Cover Sheet

**Title:** 308 How to use transect data in map unit design.

<table>
<thead>
<tr>
<th><strong>Type:</strong></th>
<th>☐ Skill</th>
<th>☒ Knowledge</th>
</tr>
</thead>
</table>

**Performance Objective:** Trainee will be able to …
- Understand how site and pedon data from transects can be used in map unit design.

**Target Proficiency:**
- ☐ Awareness  ☐ Understanding  ☐ Perform w/ Supervision
- ☒ Apply Independently  ☐ Proficiency, can teach others

**Trainer Preparation:**
Have a set of transects for a map unit available for use. Map unit could be correlated, updated, or proposed.

**Special Requirements:**
Initiate an external learning request with a SF-182 in Aglearn for this activity. Instructions and a template are located on the training webpages for OJT modules.

**Prerequisite Modules:**
- 010 How to design a map unit.
- 303 Transect - How to plan for transect data.
- 304 Transect - How to collect transect data.

**Notes:**
None

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**Approved by:**
Shawn McVey
The Five-Step OJT Cycle for **Declarative** Training
(Knowledge)

Cycle Step 5
Trainer/Trainee debrief

Cycle Step 4
Trainer observes
Trainee perform task provided as feedback

Cycle Step 3
Trainer and Trainee discuss information

Cycle Step 2
Trainee reviews materials provided

Cycle Step 1
Trainer/Trainee establish shared mental model

Trainer and Trainee
# OJT Module Lesson

## Title: 308 How to use transect data in map unit design.

<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle step 1</td>
<td>Trainer and trainee review the objective and agree on the purpose of this module.</td>
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<tr>
<td>Cycle step 2</td>
<td>Have trainee access via the internet and refresh by reading the section “Designing Map Units” in the <em>Soil Survey Manual</em>, pages 23-27. Have trainee access via the internet and refresh by reading the section “Design of Map Units” in NSSH 627.03 and review types of documentation in NSSH Exhibit 627-8.</td>
</tr>
<tr>
<td>Cycle step 3</td>
<td>Discuss with trainee the following points to be made about how transects can be used in map unit design. The trainer should add his or her own learning points to this list. Add examples from your survey area for each point as appropriate.</td>
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<tr>
<td></td>
<td>1. Identifying and naming major and minor components. (Acknowledge that tacit knowledge of a soil scientist familiar with the area can also help identify minor components not detected by transecting.</td>
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<tr>
<td></td>
<td>2. Quantifying major and minor components.</td>
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<td></td>
<td>3. Help determining the kind of map unit based on how many major components occur in most delineations.</td>
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<td></td>
<td>4. Attaining a defined level of confidence in the composition of a map unit (if transects are completed without bias in the selection of delineations and transects are properly oriented, so that they capture data representative of all segments of the map unit).</td>
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<tr>
<td></td>
<td>5. Identifying where minor components are present in all delineations or only in some delineations. Tacit knowledge of a soil scientist familiar with the area can also help here.</td>
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<tr>
<td></td>
<td>6. Identifying any delineations of a map unit that have little or no representation of dominant components but are represented by similar soils.</td>
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<td>7. Helping to detect soil patterns within the map unit.</td>
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<td>8. Verifying predictions about map units.</td>
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<td>9. Helping to distinguish and establish phases to designate map units using site and pedon data.</td>
<td>10. Helping to establish component properties representative of the map unit.</td>
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<tr>
<td>Cycle steps 4 &amp; 5</td>
<td>Answer any questions from the trainee and make sure the trainee is comfortable with the use of transect data in map unit design for soil survey.</td>
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</tbody>
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**OJT Module Lesson Measurement of Learning**

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<td>Quiz</td>
<td>Complete the quiz below.</td>
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**SF-182**

Trainee and/or supervisor access Aglearn to verify completion of the module via its SF-182.
Quiz

1. Transecting is the primary type of documentation used to determine composition of a map unit.
   a. True
   b. False

2. An experienced soil scientist could use transecting to verify predictions of map unit design.
   a. True
   b. False

3. Transecting can reveal soil patterns below the surface of the soil that are not evident to all.
   a. True
   b. False

4. Tacit knowledge of a survey area has a place in determining map unit composition, supplementing transecting data.
   a. True
   b. False

5. Transecting can help distinguish phasing of map units in map unit design.
   a. True
   b. False