Customizing the coordinate list $\overset{\&}{\overset{\&}{\overset{\&}}}$ Selecting a geoid model in MobileMapper Office

Not everybody wants to use WGS84 latitude and longitude with ellipsoid heights for their projects. Fortunately, MobileMapper Office provides a way to customize the coordinate list, choose a geoid model file, and change the units of measure for the coordinates.

MobileMap	oper Offi	ice - l	Intitled		
File View To	ools Op	tions	Help		
	6	Selec	t Coordinate Syste <u>m</u>		le
		Brow	se Coordinate Systems		
46 °32'		Units		•	
		GPS (Position <u>D</u> isplay Filter Se <u>t</u> tings		
	~	Shov	/ <u>G</u> rid		
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	~	Shov	v Quick Info		
	-	Shov	/ <u>F</u> eatures Labels		
	-	Shov	v <u>W</u> aypoint Labels		
	~	Show	V Feature <u>P</u> oints		
	122		1		

Under the Options menu choose Select Coordinate System

If the coordinate system you want to use is not on the list you can select a <New> system.

🔓 WGS 84	•
t Infection and the second s	
t [™] ≩ USA/NAD83/California (Zone3)	
¦Lີຼິຍ WGS 84 with Geoid03	100
t⊈i NAD_1983_UTM_Zone_10N	
t [™] ≆ USA/NAD83/North Carolina Geoid03	
t [™] ≆ USA/NAD83/California (Zone3) Geoid03	
🖞 🖗 WGS 84 + Geoid03	
t ^N ≆ USA/NAD83/Rhode Island - NAVD88 - USft	
🛱 NAD_1983_StatePlane_Virginia_South_FIPS_4502	
🛱 🛱 USA/NAD83/Texas (North Central)	
🖕 🖁 WGS 84~2	
🟥 🖡 USA/NAD83/Florida (East) - Geoid03 - USft	
t ^N ² LISA /NAD83/California (Zone3) NAV/D89 LIS #	

After clicking on <New> a dialog box appears that allows us to choose a predefined system from a list.

Coordinate System Wizard - Welcome	×
Welcome to Coordinate System Wizard	
I his wizard will help you :	
SELECT a PRE-DEFINED system	
Define a NEW PROJECTED system (EASTING, NORTHING, HEIGHT)	
C Define a NEW GEOGRAPHIC system (LATITUDE, LONGITUDE, HEIGHT)	
Kack Next > Cancel	Help

A click on the Next button will open the list.

🗄 🕎 NEW ZEALAND 🛛 🔺	Name	Datum	
🗄 🖓 NORWAY	Land Salar (West) [1] [1] [2] [2] [2] [2] [2] [2] [2] [2] [2] [2	NAD83-HARN	
🕀 🖓 POLAND	L [™] ≩USA/NAD83-HARN/Illinois (East)	NAD83-HARN	
🕀 🖓 PORTUGAL	LN i USA/NAD83 HARN/Illinois (West)	NAD83-HARN	
⊡ ¬▼ RUSSIA	LN C USA/NAD83-HARN/Indiana (East)	NAD83-HARN	
	LNG USA/NAD83-HARN/Indiana (West)	NAD83-HARN	
	LNG USA/NAD83-HARN/Iowa (North)	NAD83-HARN	
H Y SWEDEN	L™ CUSA/NAD83-HARN/Iowa (South)	NAD83-HARN	
⊞-Υ SWITZERLAND	Langer Harning (North) Langer Harning (1997) Langer Harning (1997	NAD83-HARN	
	L L Courter Courter (South)	NAD83-HARN	
	LN GUSA/NAD83-HARN/Kentucky (North)	NAD83-HARN	
E VIK	LN GUSA/NAD83-HARN/Kentucky (South)	NAD83-HARN	
H - ▼ UPS	LNC USA/NAD83-HARN/Louisiana (North)	NAD83-HARN	
⊡- ▼ USA	LN c USA/NAD83-HARN/Louisiana (Offshore)	NAD83-HARN	
VAD83-HARN	LNG USA/NAD83-HARN/Louisiana (South)	NAD83-HARN	
NAD83	L™⊊USA/NAD83-HARN/Maine (East)	NAD83-HARN	
	f [™] ≩LISA/NAD83-HABN/Maine,West)	NAD83-HARN	
🖮 🐨 UTM 🔄 💆			

For this example the selection is NAD83-HARN Kansas North Zone state plane coordinates. A click on the Finish button shows the coordinate system selected for the project.

Select Coordinate Sys	tem			×
C Spatial Reference Sys	stem			
LSA/NAD83-HA	RN/Kansas (Nor	th)	•	
	UK	Lancel		

But this does not automatically mean everything is ready. There is a button with three dots near the right edge of the dialog box. A click on that button brings up another dialog with more choices to make.

Projected System [USA/NA	D83-HARN/Kansas (North) + G	ieoid03 + USft *]
Datum Projection System		
System Name : USA/NA	AD83-HARN/Kansas (North) + Geoi	d03 + USft
East	🗕 East	
North	↑ North	
Height	o Up	□ With vertical correction H => H local
Unit Name :	US feet	
Meters p	ber unit : 0.30480060960122	
Vertical Datum :	🔇 Geoid03 📃	
Vertical Unit Name :	Ellipsoid	
Meters p	CD_200	
🔽 Set Vertical	S 30SJOLY Alaska99 DVR90 EGM96	
	Geoid99 GGF97 GGR99 GGR99 GSD95	OK Cancel Apply Help

Edit the system name to make it meaningful for this project and the next project too. Choose the Unit Name, Vertical Datum, and verify the settings for your customized coordinate system. With all the changes made it is time to apply the new system to the project.

Projected System [JSA/NAD83-HARN/Kansas (North)	+ Geoid03 + USft *]
Datum Projection	System	
System Name :	USA/NAD83-HARN/Kansas (North) + G	ieoid03 + USft
	East - East	_
	North North	-
	Height 🛛 🛛 Up	🚽 🔲 With vertical co
Uni	Name : US feet	•
	Meters per unit : 0.30480060960122	
Vertical	Datum : 🚫 Geoid03	•
Vertical Uni	Name : US feet	•
	Meters per unit : 0.30480060960122	
🔽 Se	: Vertical Unit = Horizontal Unit	

The next time you click on Select Coordinate System the one with the name you gave it will be on the list.

Phil Stevenson June 21, 2006