

## One Method

- Take your existing coordinates and transform them into the current realization NAD83 (2011)
  - Be aware that the NGS HTDP page can not always be used.
- Contact with NGS provided the following information

## NGS' HTDP

- Does not transfer previous NAD83 realizations
  - Implies that NAD83 (CORS96) = NAD83 (2007) = NAD83 (2011)

### TRANSFORMING POSITIONS BETWEEN REFERENCE FRAMES

Specify the reference frame for the input values:

NAD\_83(2011)/CORS96/2007) ... (North America plate fixed)  
 NAD\_83(PA11/PACP00) ... (Pacific tectonic plate fixed) ^  
 NAD\_83(MA11/MARP00) ... (Mariana tectonic plate fixed)  
 WGS\_84(original) = WGS\_84(transit) ... (NAD\_83(2011) will be used) v  
 WGS\_84(G730) ... (ITRF91 will be used)

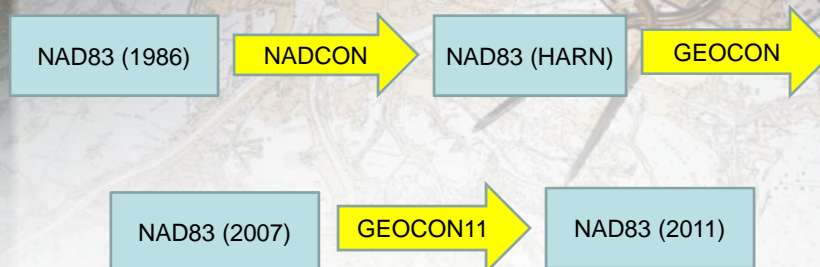
Specify the reference frame for the output values:

NAD\_83(2011)/CORS96/2007) ... (North America plate fixed)  
 NAD\_83(PA11/PACP00) ... (Pacific tectonic plate fixed) ^  
 NAD\_83(MA11/MARP00) ... (Mariana tectonic plate fixed)  
 WGS\_84(original) = WGS\_84(transit) ... (NAD\_83(2011) will be used) v  
 WGS\_84(G730) ... (ITRF91 will be used)

## Converting NAD83 (2007) to (2011)

The NAD83(1986) positions are highly distorted. Program NADCON was extended to address the special transformations of those distorted positions to the HARN realization. So use NADCON to transform NAD83(1986) positions to the NAD83(HARN) and then use GEOCON and GEOCON11 to transform NAD83(HARN) to NAD83(2007) and NAD83(2011). For transformations between different epochs other than those of the HARN, 2007 and 2011, HTDP can then be used. The epoch of the NAD83(2011) is 2010.0, for NAD83(2007) it is 2002.0 except in CA, WA, OR, NV and AZ where it is 2007.0. For the HARN, the situation is much more complex. The attached figure gives an approximate idea of the epoch for each state. In some states, there are multiple epochs, but since the original NAD83(1986) are so distorted, you can safely take the first epoch to the left to be the epoch of the HARN in that state.

## Process Outlined



Then use HTDP to go between different epochs and datums

	1986	87	88	89	90	91	92	93	94	95	96	97	98	99	2000	01	02	03	04	05	96	07	08	09	10	11
AL	1986																									
AK	1986																									
AZ	1986																									
CA	1986																									
CO	1986																									
CT	1986																									
DC	1986																									
DE	1986																									
FL	1986																									
GA	1986																									
IA	1986																									
ID	1986																									
IL	1986																									
IN	1986																									
KS	1986																									
KY	1986																									
LA	1986																									
MA	1986																									
MD	1986																									
ME	1986																									
MI	1986																									
MN	1986																									
MO	1986																									
MS	1986																									
MT	1986																									
NC	1986																									
ND	1986																									
NE	1986																									
NH	1986																									
NJ	1986																									
NM	1986																									
NV	1986																									
NY	1986																									
OH	1986																									
OK	1986																									
OR	1986																									
PA	1986																									
RI	1986																									
SC	1986																									
SD	1986																									
TN	1986																									
TX	1986																									
UT	1986																									
VA	1986																									
VT	1986																									

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