

# MORPH Non-Commercial Release Whitepaper

<http://www.faceaginggroup.com>

The release of MORPH contains 55,000 unique images of more than 13,000 individuals, spanning from 2003 to late 2007. Ages range from 16 to 77 with a median age of 33. The average number of images per individual is 4 and the average time between photos is 164 days, with the minimum being 1 day and the maximum being 1681 days. The standard deviation of days between images is 180. Table A shows the distribution of images by gender and ancestry; Table B shows the number of additional images that exist from the initial facial image; Table C shows the number of facial images in this release by decade-of-life; and Table D lists the metadata that supplements the images. Figures 1 and 2 present sample sets of images that demonstrate the age progressions found in this release.

**Table A.** Number of Facial Images by Gender and Ancestry (n=55,134)

	African	European	Asian	Hispanic	“Other”	Total
<b>Male</b>	36,832	7,961	141	1,667	44	46,645
<b>Female</b>	5,757	2,598	13	102	19	8,489
<b>Total</b>	42,589	10,559	154	1,769	63	55,134

**Table B.** Number of Additional Images per Subject

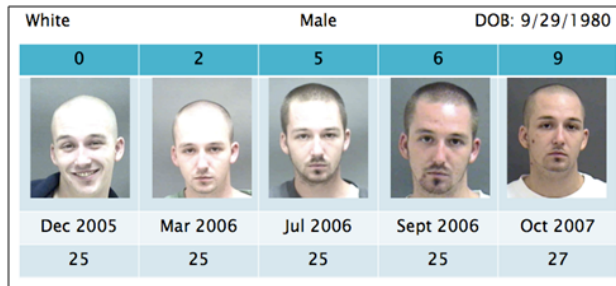
	1	2	3	4	5+	Total
<b>Male</b>	373	2,350	3,606	1,975	3,155	11,459
<b>Female</b>	85	478	712	352	532	2,159
<b>Total</b>	458	2,828	4,318	1,308	3,687	13,618

**Table C.** Number of Facial Images by Gender and Decade-of-Life (n=55,134)

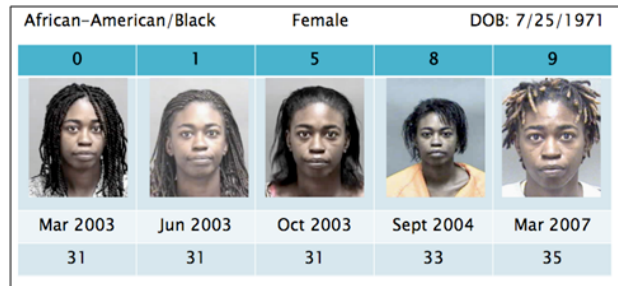
	< 20	20 – 29	30-39	40-49	50+	Total
<b>Male</b>	6,638	14,016	12,447	10,062	3,482	46,645
<b>Female</b>	831	2,309	2,910	1,988	451	8,489
<b>Total</b>	7,469	16,325	15,357	12,050	3,933	55,134

**Table D.** Metadata Details

Subject Identifier (six digit ID with leading zeros)	Race ( B, W, A, H, O )
Picture Identifier ( beginning at 0 for each subject )	Gender ( M / F )
Date of Birth (mm/dd/yyyy)	Facial Hair Flag
Image Date (mm/dd/yyyy)	Glasses Flag
Age Difference ( number of days since last image )	
Image Filename ( ID_[picture_id][M/F][Age].JPG )	



**Fig. 1.** Image Progression for White Male



**Fig. 2.** Image Progression for African-American Female