

Pixels	Naïve	Dynamic
16 x 16	0.008	0.003
160 x 63	0.3	0.1
360 x 360	3.4	1.1
640 x 253	4.2	1.5
961 x 961	35	10

Clearly with dynamic programming enabled, the seam carving algorithm is significantly more efficient than the naïve implementation for larger images.

## Recurrence Relations

### Dynamic

$$S[n] = S[j] + S[i] = |j| + |i|$$

### Naïve

$$S[n] = (S[j] * S[j-1]) * S[i] = |j| * |i|$$

