Results of $\text{D}^{18}$ experiment indicate carboxylates do go through tetrahedral intermediates → the above step during saponification must be shown separately.

**Transesterification**
\[ \text{anionic} \]

\[ \text{cationic} \]

Hydrolysis: reaction with water \[ \text{H}_2\text{O} \]
Solvolyis: reaction with an alcohol \[ \text{ROH} \]
Aminolysis: reaction with ammonia \[ \text{NH}_2\text{H} \]
Although $\text{N}_2\text{O}_5$ is a very poor leaving group, if it comes off, it instantly neutralizes the product, prevent reverse rxn.