Pipeline Stage 1 Synchronization Stage 0

SCENE\_VERTEX\_BUFFER
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

SCENE\_INDEX\_BUFFER
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

SCENE\_INSTANCE\_BUFFER
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

SCENE\_MESH\_INDEX\_BUFFER
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

SCENE\_MAT\_PARAM\_BUFFER
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

SCENE\_ALBEDO\_MAPS
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

SCENE\_NORMAL\_MAPS
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

SCENE\_AO\_MAPS
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

SCENE\_METALLIC\_MAPS
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

SCENE\_ROUGHNESS\_MAPS
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

PER\_FRAME\_BUFFER
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

GEOMETRY\_ALBEDO\_AO\_BUFFER
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

GEOMETRY\_NORM\_MET\_ROUGH\_BUFFER
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

GEOMETRY\_DEPTH\_STENCIL
--OWNERSHIP CHANGE READ-GRAPHICS -> COMPUTE

Pipeline Stage 3
Synchronization Stage 1

PER\_FRAME\_BUFFER
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

GEOMETRY\_ALBEDO\_AO\_BUFFER
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

GEOMETRY\_NORM\_MET\_ROUGH\_BUFFER
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

GEOMETRY\_DEPTH\_STENCIL
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

RADIANCE\_TEXTURE
--TRANSITION FOR READ-COMPUTE -> GRAPHICS

Pipeline Stage 5 Synchronization Stage 2

SCENE\_VERTEX\_BUFFER
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

SCENE\_INDEX\_BUFFER
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

SCENE\_INSTANCE\_BUFFER
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

SCENE\_MESH\_INDEX\_BUFFER
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

SCENE\_MAT\_PARAM\_BUFFER
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

SCENE\_ALBEDO\_MAPS
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

SCENE\_NORMAL\_MAPS
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

SCENE\_AO\_MAPS --OWNERSHIP CHANGE READ--COMPUTE -> GRAPHICS

SCENE\_METALLIC\_MAPS
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

SCENE\_ROUGHNESS\_MAPS
--OWNERSHIP CHANGE READ-COMPUTE -> GRAPHICS

Pipeline Stage 4

Render Stage 2

Shading Render Stage

Pipeline Stage 6 Synchronization Stage 3

RADIANCE\_TEXTURE
--TRANSITION FOR WRITE-GRAPHICS -> COMPUTE

Pipeline Stage 2
Render Stage 1
Ray Tracing Render Stage

Pipeline Stage 0 Render Stage 0 Geometry Render Stage