https://gemini.google.com/u/1/app/431cc17871bb821b

Placeholder Image Variant Manifest (V1 Draft)

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### 1\. Introduction

This manifest outlines a recommended set of image variants to be generated by the platform's image processing pipeline. The goal is to provide optimized image sizes and formats for various UI contexts, ensuring fast load times and good visual quality, especially on mobile devices. Each variant definition should guide the backend image processing service. The `public.media.image\_variants\_json` field will store references (e.g., paths or keys) to these generated variants for each original uploaded image.

### 2\. Variant Naming Convention

A consistent naming convention is crucial. Suggestion: `context\_sizeDescriptor\_aspectRatio\_format`

- Context/Usecase: e.g., `hero`, `gallery`, `card`, `thumb`

- Size Descriptor: e.g., `lg` (large), `md` (medium), `sm` (small), or specific width like `w1920`, `w800`, `w400`

- Aspect Ratio (Optional but recommended for key uses): e.g., `16x9`, `4x3`, `1x1` (square)

- Format: e.g., `webp`, `jpg`

Example: `hero\_lg\_16x9\_webp`, `card\_sm\_4x3\_jpg`, `thumb\_sq\_100\_webp`

### 3\. Common Variant Definitions

| Variant Key (Example) | Intended Use / Typical Role Association | Target Dimensions (Approx. WxH) | Aspect Ratio | Format(s) | Cropping Strategy | Notes |

| `hero\_lg\_16x9` | Main hero images (Trails, Articles, Waypoints) for large desktop screens | `1920x1080px` | `16:9` | `WebP`, `JPG` | Center-Crop / Smart-Crop | Primary high-quality display. |

| `hero\_md\_16x9` | Hero images for tablet / smaller desktop | `1280x720px` | `16:9` | `WebP`, `JPG` | Center-Crop / Smart-Crop | |

| `hero\_sm\_16x9` | Hero images for mobile screens | `768x432px` | `16:9` | `WebP`, `JPG` | Center-Crop / Smart-Crop | |

| `gallery\_display\_lg` | Full-size gallery images (lightbox) | `max-width: 1920px` | Original | `WebP`, `JPG` | Scale to Fit | Preserve original aspect ratio. |

| `gallery\_display\_md` | Medium gallery images | `max-width: 1280px` | Original | `WebP`, `JPG` | Scale to Fit | |

| `gallery\_thumb\_sq` | Square thumbnails for gallery previews | `400x400px` | `1:1` | `WebP`, `JPG` | Center-Crop | |

| `card\_std\_4x3` | Standard image for listing cards (Trails, Articles, Waypoints) | `600x450px` | `4:3` | `WebP`, `JPG` | Center-Crop | Common for consistent card layouts. |

| `avatar\_lg\_1x1` | User profile avatars (large display) | `200x200px` | `1:1` | `WebP`, `PNG` | Center-Crop | `public.profiles.public\_avatar\_media\_id` |

| `avatar\_sm\_1x1` | User profile avatars (small display, e.g., in comments) | `48x48px` | `1:1` | `WebP`, `PNG` | Center-Crop | |

| `map\_image\_static\_lg` | Detailed static map images | `max-width: 1200px` | Original | `PNG`, `JPG` | Scale to Fit | For clarity, PNG might be preferred if line art. |

| `inline\_image\_md` | Images embedded within article body content | `max-width: 800px` | Original | `WebP`, `JPG` | Scale to Fit | Max width to fit content column. |

Notes on Manifest:

- This is a starting point. Actual dimensions and variants will depend on final UI design.

- The image processing pipeline should aim to generate WebP for modern browsers and fall back to JPG/PNG for others, or provide both.

- Consider file size targets for each variant to optimize performance.

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