Trail Evaluation Matrix Criteria

These evaluation criteria definitions are provided to assist municipalities and others in determining the most appropriate rating value. There are five broad categories that must be considered when developing trails, and comprise this matrix: Environmental/Regulatory, Ownership, Design, Social and Fiscal.

Note: I've modified so that there is a category question, clarifying statement, and then several questions to answer. This way the more yes answers will equal the higher score and it will be clearer exactly what impact there is. There would be one point per yes answer.

ENVIRONMENTAL/REGULATORY

1. **Potential to Minimize or Avoid Environmental and Cultural Impacts**

- Trail should avoid and/or protect cultural resources and have a low impact on fragile environmental areas.
    - Does the trail minimize impacts to biological resources and existing quality vegetation?
    - Does the trail minimize the need to adjust slopes?
    - Does the trail avoid sensitive plant and animal species?
    - Does the trail avoid sensitive aquatic habitats?
    - Does the trail avoid impacts to water quality?
    - Does the trail avoid jurisdictional wetlands and riparian habitat areas?
    - Does the trail avoid impacts to cultural resources?

2. **Potential to Minimize Number of Permits Required**

- The trail should minimize the need for environmental permits and regulatory approvals from governmental agencies such as the US Fish and Wildlife Service (USFWS), the US Army Corps of Engineers (ACOE), Colorado Department of Transportation (CDOT), and the Colorado Parks and Wildlife (CPW).
    - Does the trail avoid the need for wetlands permits?
    - Does the trail avoid the need for CDOT use or license agreements?
    - Does the trail resolve any objections from CPW?

3. **Potential to Minimize Footprint through Construction**

- Trail siting should work to protect quality vegetative cover and land and water resources, and use existing openings in vegetation and existing paths for trail placement whenever feasible. The trail should bypass fragile areas which are particularly susceptible to damage.

- The trail should blend with the terrain by taking full advantage of the natural topography. The trail should curve with the land rather than cut across it and have gently undulating grads as opposed to long, uniform grades.

    - Does the trail utilize existing trails or disturbances?
    - Does the trail avoid impacts to high quality existing native vegetation?
    - Does the trail avoid fragile vegetation?

- Does the trail alignment blend with the natural topography, minimizing large areas of impact?

4. Relevance with Existing Adopted Plans

- The trail should be consistent with applicable local trail/parks plans, comprehensive master plans and neighborhood-specific design plans where applicable. Trails may also be part of a larger regional trail plan.
  - Is the trail shown on a local adopted master plan (comprehensive, neighborhood or site specific)?
  - Is the trail part of an adopted regional trail plan (county or state)?

LAND OWNERSHIP OR USE

1. Potential to Minimize Impacts to Private Property

- The trail should try to minimize negative impacts to adjacent private property. Where the trail passes adjacent to commercial developments or residential areas, it should be located to minimize adverse impacts and avoid potential land use conflicts.

  - Does the trail avoid adjacent private property impacts (noise, proximity)?
  - If there are potential impacts, does the trail design include buffering to minimize impacts?

2. Potential to Avoid Railroad Corridor Constraints

- The trail should try to minimize impacts on, or agreements to use, railroad rights-of-way as coordination with a railroad company which can be time consuming and difficult.
  - Does the trail avoid a railroad crossing or use of rail corridor?
  - If not, is a PUC agreement already underway and likely to be approved?

3. Potential to Obtain Property Ownership & Access

- Means through which trail access can be obtained have been, or can be, secured, either through easements, use agreements or land purchases. When possible, the trail should be placed on land already owned or within existing easements or rights of way.
  - Is the trail on land already owned or on easements already acquired?
  - If not owned or under an easement, is the land needed reasonably easy to obtain?
  - If not owned or under an easement, are negotiations already under way?
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DESIGN / TECHNICAL CHALLENGES

1. **Potential to Connect to Existing or Proposed Class II Bikeways (on-street bike lanes)**

- Whenever possible, the trail should connect with existing and/or proposed Class II bikeways to expand the trail system, maximize connectivity and provide alternate routes. Safe road crossings are also needed using grade separated crossings, signalized crossings, marked crossings and / or traffic calming devices. Mid-block crossings should be avoided.
    - Does the trail connect to a Class II bikeway?
    - Does the trail provide connectivity between roads or other trails?
    - If a road crossing is needed, does the trail plan for a grade separated crossing?
    - If a road crossing is needed, is that crossing point at an existing signalized intersection or at an intersection with an existing stop sign?
    - Are mid-block crossings avoided?
    - If needed, is traffic calming included?

2. **Potential for Connectivity**

- Provide continuous and direct routes which link trail users to places of employment, residential areas, recreational areas and centers of activity as efficiently as possible. The trail should maximize commuter and recreational value by linking neighborhoods and communities to existing or proposed regional bikeways with regional transportation opportunities. The trail should be integrated into a regional system of alternative transportation connectivity and have the maximum number of destinations with minimum delay. The trail should provide a high quality recreational experience.
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    - Does the trail connect to a major local destination node – shopping center, recreational area, school or park?
    - Does the trail connect to a cultural site of interest?
    - Does the trail connect to other local trails?
    - Does the trail connect to regional trails?
    - Does the trail provide optimal commuter efficiency?
    - Does the trail provide a quality recreational experience?

3. **Potential to Provide an Accessible Trail Route and Diversity of Use**

The trail should be designed to maintain ADA accessibility without significant grading, ramps and retaining walls. The trail should be designed for use by multiple types of travel from walking, jogging rollerblading and cycling, as well as provide optional routes for varying levels of abilities.

- Does the trail have the potential to meet ADA grades without excessive grading or retaining walls?
- Does the trail accommodate pedestrians and cyclists?
- Does the trail accommodate roller bladers and skaters?
- Does the trail accommodate equestrians?

4. Potential for Aesthetic Value

- The trail should maximize the possible aesthetic potential by integrating existing aesthetic attributes such as views, unique landforms or high quality vegetation whenever possible.

- Avoid areas with noise and odor sources and avoid proximity to roads, power lines, commercial and industrial developments and other features that are incompatible with the safety and enjoyment of the trail**.**

    - Does the trail minimize adjacency to noisy or dusty areas (high traffic roads, gravel roads, noisy industrial areas, etc.)?
    - Does the trail have locations with high quality views?
    - Does the trail have proximity to and views of water?
    - Does the trail have locations with unique attributes such as landforms?
    - Does the trail have potential for shade?
    - Does the trail reach an elevation so a vista view can be enjoyed?

5. Potential to Utilize Existing Infrastructure

- The trail should take advantage of existing infrastructure is possible, such as parking areas, existing restrooms and vegetation.
    - Does the trail utilize an existing parking area as a trailhead?
    - Does the trail utilize an existing restroom?
    - Does the trail utilize existing site amenities such as trash cans, benches or picnic facilities?
    - Does the trail utilize existing trees for shade?

6. Potential for Rest Areas and Overlooks with Signage

- The trail should take full advantage of the surrounding natural beauty and views by locating rest areas, benches, and/or overlooks at key points and large open areas as well as use landscaping, natural vegetation or topography to screen objectionable views from the trail user.

- The trail should accommodate the potential for signage for identification, way-finding or education.

7. Potential to Provide a Staging Area

- Accommodation for trailheads, strategically placed motor vehicle parking and staging areas should be made.

- Where feasible, trails should be positioned adjacent to existing parking areas, staging areas and areas with public amenities such as restrooms.

- Staging areas provide safe vehicular ingress and egress, as well as highlight crossing areas and the trail itself.

8. Safety

- Safety should be evaluated in the location and design of a trail project. The trail should avoid known safety issues such as drop-off's, major road crossings or close adjacency to swift waters.
    - Does the trail avoid significant grade changes (drop offs) or plan to barricade those areas?
    - Does the trail avoid major road crossings?
    - Does the trail avoid close proximity to swift water or other natural hazards?

9. Technical Design Challenges

- Design challenges should be minimized where possible. Conflicts with utilities, ditches or streams or need for structural design solutions should be avoided.
    - Does the trail avoid utility conflicts where possible?
    - Does the trail avoid ditch or stream crossings where possible?
    - Does the trail avoid areas where structural design is needed (high retaining walls etc.) where possible?

SOCIAL

Potential to Provide or Improve Safe Non-Motorized Travel Options

- Shows a lack of safe non-motorized travel options in area.

1. Direct Overall Community Support

- Direct or documented demand from the community whether in survey data, lobbying of elected officials or other demonstrated means.
    - Is there existing evidence of community support?
    - Was the trail part of a previously held public process as part of the design?
    - Is the support demonstrated by a significant portion of the population?

2. Potential to Obtain Community Support

- Demonstrated need is present but not marketed to community**.**
    - Is a community outreach process underway for the trail?
    - Is a community outreach process planned for the trail?

FISCAL

1. **Potential to Minimize Construction & Maintenance Costs and for local Economic benefit**

- The trail alignment should minimize the total cost of providing and operating the trail to the greatest extent feasible and while planning for quality construction, long term durability and easy maintenance.
    - Does the trail design plan for durable materials?
    - Does the trail design plan seek to minimize costs while not sacrificing long term durability?
    - Has the trail design been vetted by maintenance staff to include provisions for maintainability?

2. **Potential to Access Maximize Funding Sources**

- Whenever possible, develop trail alignments that might qualify for grants and governmental funding sources.

- Seek to develop the trail in conjunction with capital improvement projects, future road improvements, land development and/or redevelopment projects.

    - Does the trail project include private partnership funding or in-kind support?
    - Does the trail project meet criterion for GOCO grant funding?
    - Is the trail, or a portion thereof, required to be built by a developer as part of a land development proposal?
    - Is funding earmarked for the project as part of a Capital Improvement Program? – Has that funding been approved?
    - Would partnership or grant funding be lost if not matched by local government funds?
    - Would local government funding be lost if not matched by grant or partnership funds?

3. **Potential for Eco-Tourism or Economic Benefit**
    - Where possible, trail projects should complement adjacent business interests and if possible encourage eco-tourism through cycling / pedestrian trail systems.
        - Does the project seek to tie in to adjacent businesses?
        - Do support services for trail visitation exist along the trail corridor (bike shops, restaurants, recreational destinations, etc.)
        - Is eco-tourism likely to occur with the development of this trail?

4. **Potential for Near-Term Construction**

- To the greatest extent feasible, design trail alignments to facilitate trail construction without interagency and private property negotiations and lengthy coordination. A higher level of ranking is obtained if the project is shovel ready, or near shovel ready.
    - Is land necessary for the trail already under the control of the local government (easements, ownership, and donations already complete)?
    - Is land necessary for the trail close to being under the control of the local government?
    - Is master planning for the trail complete?
    - Is Design Development (50% construction documents) complete?
    - Are Construction Documents complete?
    - Are necessary permits or review processes complete or obtained?