REVIEW OF THE VALLEY TRANSPORTATION AUTHORITY'S DRAFT "COMMUNITY DESIGN AND TRANSPORTATION: A MANUAL OF BEST PRACTICES FOR INTEGRATING TRANSPORTATION AND LAND USE"

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) greatly appreciates the opportunity to provide review comments on the Valley Transportation Authority's well-written draft: *Community Design and Transportation: A Manual of Best Practices for Integrating Transportation and Land Use* (Manual). Transportation land use planning plays a significant role in stormwater pollution prevention efforts due to the impacts that transportation systems can have on water quality via increased impervious surface area (roadways), tailpipe emissions, fluid leaks, or metal deposition. Recent stormwater permit requirement modifications will require SCVURPPP agencies (municipalities throughout Santa Clara County) to require long-term, permanent treatment of runoff from projects, including transportation projects of a significant size. Incorporating community design concepts to help minimize the effect of transportation alternatives to water quality will help the VTA and our local municipalities meet these new regulations in the most cost-efficient way possible.

As drafted, the Manual does a good job promoting collaborative planning among planners, traffic engineers, urban designers, architects, emergency response officials, and the community. It would be advantageous to integrate the environmental benefits of your plan and, where needed, work to mitigate more fully the concerns regarding the disruption of the natural systems resulting from transportation impacts. As is, the document concentrates heavily on the human element of the environment, which is important in encouraging pedestrian pleasantries and safety. However, there are many direct environmental advantages in the strategies and philosophies encouraged by the VTA that are not emphasized. We encourage VTA to highlight the multi-disciplinary benefits (e.g., water quality, air quality, other environmental health, aesthetics) of the practices in order to convey the full set of reasons why pedestrian friendly environments are being encouraged.

We appreciate your outreach to us for our peer review. Likewise, we hope that as this document progresses into specific planning and implementation phases, VTA will continue to invite environmental engineers into the planning and design process to mitigate site-specific environmental concerns such as drainage. Consideration of hydrologic effects in the early planning and design processes can mitigate adverse impacts to property as well as cost-effectively contribute to long-term sustainability and a more efficient project approval process.

Lastly, the environmental regulations referred to briefly in the introduction, above, provide a channel through which best practices can be implemented. Because water quality is directly related to land use, the regulations and policies already in use may apply in promotion of the principles advocated in this Manual. Although their interests are not identical, water quality and sustainable transportation development advocates approach future demands using similar tactics. A synergistic working relationship will prove advantageous for both. Below are suggestions for integrating the above ideas.

1. **Chapter 7. Opportunity 1: Building Community Support for Best Practices**
   It is also important to note that opposition to the best practices may stem from the fear of increased development density and loss of green space. It should be clarified that

increased development density in some places actually relieves some of the pressures to develop open space. One strategy to calm public concerns is to set aside land during the planning stages for open space conservation.

2. **Chapter 7. Opportunity 4: Innovative Street Design Standards.**

   Strategy: Practice an Interdisciplinary Approach to Street Design
   The strategy would benefit from the inclusion of environmental planners/engineers in the interdisciplinary approach.

   Strategy: Cross-train Street Designers and Planners
   Planners, urban designers, and architects can also benefit from understanding the practicality of maintaining a functioning environmental system on site as opposed to accommodating for adjustments after they pose problems.

3. **Chapter 7. Opportunity 7. Attracting Developers to Best Practices**
   Best Practices can be posed as a means to meet environmental regulations already in place. These include landscaping, parking, open space, impervious surface minimization, drainage requirements, etc. Incorporating the concepts in *Start at the Source* related to these topics into your Manual will assist developers to more easily meet these environmental regulations.

4. **Chapter 2. Principle 1: Target Growth to Cores, Corridors and Station Areas**
   Increasing the density of development in cores, corridors and station areas conserves precious open space in its natural form and minimizes the increase in impervious surface area. Contiguous open space increases natural filtration, which reduces the total volume of, as well as the concentration of pollutants in surface flow. Impervious surfaces both prevent the natural filtration of water and collect pollutants until they are washed away by runoff from storms.

5. **Chapter 2. Principle 5: Design in Context**
   In order to encourage more livable and walkable communities, it is important to create aesthetically consistent, pleasing environs. However, in promoting sustainable development, designs in the context of the natural site topography and drainage characteristics should be encouraged. To minimize the adverse impacts on the landscape, planners should understand how the site functioned before development and accommodate changes with sustainable design. Design in context not only means that the aesthetics should be consistent with the surrounding developments but also that the overall site design should be in confluence with the natural systems that dominate.

6. **Chapter 2. Principle 7: Create a Multi-Modal Transportation System**
   In addition to the methods noted to encourage alternative modes of transportation, we suggest that the Manual encourage authorities to provide incentives to local employers for providing delivery or carpool services and telecommuting opportunities.

7. **Chapter 2. Principle 8: Establish Streets as Places**
   The design elements mentioned to establish streets as systems can also be functional in supporting sustainability. By providing concave landscaped parkstrips with sidewalks that slope to them, the total volume of and concentration of pollutants in runoff into creeks and waterbodies is reduced while pedestrians walking on the sidewalk are buffered from the street. Street trees are especially useful in lessoning the amount and velocity of runoff, while providing pedestrian and neighborhood amenities.

8. **Chapter 2. Principle 10: Manage Parking**
   In addition to the strategies already mentioned, the recommendations listed below should be considered when attempting to manage parking:
   a. Work with local governments and financial entities to reduce parking requirements if businesses provide a carpool or delivery service or have telecommuting opportunities.
   b. Support above ground or underground covered parking structures.

9. **Appendix F. Field Surveys**
   It is recommended that the field surveys incorporate drainage design considerations such as:
   a. concave medians that drain runoff from the street
   b. sidewalks graded to drain into park strips
   c. if raised curves are necessary, incorporate drainage cuts for runoff to flow into the median planter.

Land Use Subgroup Input. SCVURPPP staff also received input from the Santa Clara Basin Watershed Management Initiative's Land Use Subgroup (LUS) in reviewing this manual. This includes a comment from Richard McMurtry (Regional Board staff, LUS member), which we support and include herein.

> Seems to me that a major issue with transportation facilities has to do with the design of new stream crossings and remediation of existing stream crossings. Some existing stream crossing are barriers to fish migration; some have necessitated excessive hardscaping upstream or downstream of such crossings to address channel instability issues associated with the crossings; others have precluded more natural flood control solutions because of difficulty of remediating the stream crossing.
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> The VTA plan should provide for designs that take these potential impacts into account and should provide for eventual removal of barriers to fish migration caused by transportation crossings and replacement of structures, which have precluded more natural flood control solutions where such replacement would enable restoration of stream function.

Some work is being done in this regard in Marin County at present. Please contact Wendy Edde, Program Staff at (510) 832-2852 or wendyedde@eoainc.com for contact information.