

# Evaluation of Health Impact Assessment: Clark County Bicycle and Pedestrian Master Plan



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## Preface

This report evaluates the role of Health Impact Assessment (HIA) in the development and adoption of the Clark County Bicycle and Pedestrian Master Plan adopted in November 2010. There are two components to the evaluation: Outcome Evaluation and Impact Evaluation. The Outcome Evaluation examines the recommendations and comments made in the course of conducting the HIA, drawing conclusions about the extent to which each was adopted in the final plan. In the Impact Evaluation, we analyze comments from key informant interviews regarding the role of the HIA in the decision-making processes related to the plan.

Both evaluations are designed to aid CCPH staff in judging the effectiveness of this HIA as well as screening and scoping future HIAs. It is our hope that this HIA and evaluation also contribute to the emerging practice of HIA.

## Outcome Evaluation

*How did the HIA influence the final product?*

*How are health determinants different as a result of the HIA?*

## Background

In May of 2010, Clark County Public Health (CCPH) issued a Rapid HIA on the Clark County Bicycle and Pedestrian Master Plan. The recommendations made in that document were intended to guide the development of the plan toward strategies that maximize benefits to community health. These included a recommended geographic focus area based on built environment characteristics, socioeconomic status, and health outcomes. In addition to the formal recommendations made in the Rapid HIA, CCPH submitted comments on the draft plan that included new recommendations and in some cases repeated the recommendations of the HIA. These recommendations and comments constitute the two forms of substantive input CCPH contributed as a result of the HIA.

In this section of the evaluation we present analysis documenting the extent to which CCPH input was incorporated into the final plan. At the conclusion of this report, we discuss how determinants of health may change as a result of this input.

The final plan adopted by the Board of County Commissioners in November 2010 represents the adoption of recommendations issued as part of the Rapid HIA. Clark County Public Health (CCPH) staff analyzed the final plan and compared it to the recommendations to determine the extent to which each recommendation was adopted. Each recommendation was evaluated and categorized as not adopted, partially adopted, or fully adopted as defined below.

## Evaluation of Recommendations

**Not adopted (○):** Recommendation was not acknowledged or incorporated into any part of the Plan.

**Partially adopted (◉):** Recommendation was integrated into the plan in an incomplete way or lacks a critical element in its adopted form.

**Fully adopted (●):** Recommendation was integrated and explicitly stated in the Plan.

Findings from this analysis are detailed below and summarized in Table 1. We cannot be certain whether the policies recommended in the HIA would have been adopted in some form even in the absence of the HIA. That is to say, even if we had not conducted the HIA, some of the recommendations might have been suggested by others. However, the verbatim inclusion of many of the recommendations indicates that either the HIA recommendations captured the input of others or that no other similar input was offered.

Table 1. Evaluation of HIA recommendations summary

	Recommendation	Degree of Adoption
	<i>Projects</i>	
1	Include low-speed roadway designs as bicycle and pedestrian projects	◉
2	Implement a variety of bikeway facility types	◉
	<i>Programs</i>	
3	Include temporary street closures (ciclovias) in programs	●
4	Add programs that manage automobile parking	●
	<i>Policies</i>	
5	Declare measureable targets for project objectives. The plan should include: <ul style="list-style-type: none"> <li>• Numeric objectives that define a desirable level of service</li> <li>• Which government agency is responsible for implementation and when</li> <li>• Benchmarks and performance measures for assessing progress</li> </ul>	◉
6	Prioritize projects and adopt policies that increase the following measures of walkability: connectivity, urban design, land use mix, and residential density. Specific proposals for consideration (not mentioned in the plan) include: <ul style="list-style-type: none"> <li>• limit construction of new cul-de-sacs</li> <li>• connect existing cul-de-sacs</li> <li>• limit block size</li> <li>• design for imageability, enclosure, human scale, transparency, and complexity</li> <li>• encourage a dense mix of land uses</li> <li>• encourage higher density housing</li> </ul>	●
7	Create policies to increase bicycle and pedestrian access to nutritious food	●
8	Design for inexperienced cyclists	●
9	Include health and equity in project evaluation criteria	●
10	Recognize increased numbers of bicyclists and pedestrians as a safety strategy	●
	<i>Recommended Geographic Focus</i>	
11	Focus on the area south of the I-5/I-205 junction, north of Vancouver city limits, and west of 182 <sup>nd</sup> Avenue/ NE Ward Road	●

**Recommendation 1.** *Include low-speed roadway designs as bicycle and pedestrian projects.*

**Finding:** Partially adopted

The plan addresses this recommendation through policy 6.2, “Include low-speed roadway designs as bicycle and pedestrian projects”. While the verbatim integration of the HIA recommendation as a policy is certainly a positive affirmation of the recommendation, the proposed projects do not include traffic calming, bicycle boulevards, shared lane markings, narrow roadways, or any other features that would be indicative of low-speed roadway designs.

**Recommendation 2.** *Implement a variety of bikeway facility types.*

**Finding:** Partially adopted

The plan includes action 1.1.4, “Design a variety of bikeway facility types that provide transportation and recreation opportunities for all levels of cyclists with a focus on meeting the needs of inexperienced cyclists.” The prioritized bicycle and pedestrian facility types included in the plan are bike lanes, sidewalks, and off-street paths. The off-street path network proposed in the plan is extensive and will provide a multitude of recreation and transportation options when implemented. The best practices matrix included in the plan identifies many innovative treatments and strategies to improve the walking or cycling experience of users. However, the only on-street facility types identified as priority projects in the plan are bike lanes and sidewalks. Other options for bicycle facility treatments include low-speed street designs such as bicycle boulevards, shared lane markings, bicycle-specific signal heads, enhanced crossings for both bicycles and pedestrians, cycle tracks, and bike boxes. As discussed in the Comprehensive HIA, researchers have found that a variety of facility types are most likely to attract new cyclists. A recent study concluded “a network of different types of infrastructure appears necessary to attract new people to bicycling. Simply adding bike lanes to all new major roads is unlikely to achieve high rates of bicycling”.<sup>1</sup>

**Recommendation 3.** *Include temporary street closures (ciclovias) in programs.*

**Finding:** Fully adopted

Chapter 7 of the plan recommends temporary street closures as a priority program, going so far as to develop a specific name for the program, “Clarklovias”. The plan describes an ideal event that would include seven to ten miles of street closures and suggests a potential route.

**Recommendation 4.** *Add programs that manage automobile parking.*

**Finding:** Fully adopted

The planning committee considered several options that would have involved pricing automobile parking as a funding source for bicycle and pedestrian infrastructure, but ultimately decided not to pursue these options. The plan includes action 1.3.2., “Incentivize the development of bicycle parking by offering reduced automobile parking minimums for developments that include bicycle parking.” The plan lists this action as a way to serve the

1. Dill, J. (2009). Bicycling for transportation and health: the role of infrastructure. *Journal of Public Health Policy*, 30, S95-S110

objective of increasing the amount of bicycle parking available. This is different from the recommendation from the HIA, which urged managing parking for the purpose of increasing bicycle and pedestrian mode share. This concern is addressed by Objective 3.1, “Encourage use of alternative types of transportation, particularly those that reduce mobile emissions (bicycle, walking, carpools, and public transit) by implementing Transportation Demand Management Strategies aimed at reducing the number of drive alone trips.”

**Recommendation 5.** *Declare measurable targets for project objectives. The plan should include:*

- Numeric objectives that define a desirable level of service*
- Which government agency is responsible for implementation and when*
- Benchmarks and performance measures for assessing progress*

**Finding:** Partially adopted

Numeric objectives are few in the plan, and which agency is responsible for implementing the actions identified in the plan is often unclear. However, for some objectives there is a timeline and the responsible organization is identified. The plan includes plans for monitoring and establishing benchmarks, such as action 4.4.2, “Install continuous counting devices to track ridership goals.” However, the plan does not cite a specific ridership goal other than “increase the number”.

The only goal, objective, or action that has an attached numeric performance measure is action 4.4.4, which encourages the county to use crash data to monitor bicycle and pedestrian-related crashes. The plan cites the modest numeric target of a 10 percent reduction on a per capita basis over the next twenty years. This is substantially greater than the statewide WSDOT initiative, “Target Zero”.

**Recommendation 6.** *Prioritize projects and adopt policies that increase the following measures of walkability: connectivity, urban design, land use mix, and residential density. Specific proposals for consideration (not mentioned in the plan) include:*

- *limit construction of new cul-de-sacs*
- *connect existing cul-de-sacs*
- *limit block size*
- *design for imageability, enclosure, human scale, transparency, and complexity*
- *encourage a dense mix of land uses*
- *encourage higher density housing*

**Finding:** Fully adopted

This complex recommendation aimed at connecting land use to transportation planning was integrated as a separate goal. After a committee member recommended that active transportation for health be included as a goal of the plan, Community Planning invited CCPH to draft this goal, which was eventually incorporated in the following form:

**Goal 6. Active Transportation Planning and Bicycle-and-Pedestrian-Supportive Land Uses**

**Objective 6.1** *Increase development practices that are supportive of walking and cycling.*

**Action 6.1.1** *Ensure consistent review of road projects & development proposals in the planning stage*

by the Bicycle and Pedestrian Advisory Committee.

**Action 6.1.2** Include low-speed roadway designs as bicycle and pedestrian projects.

**Action 6.1.3** Prioritize projects and adopt policies that increase measures of walkability.

**Action 6.1.4** Change title 40 and/or road standards to limit the construction of new cul-de-sacs and connect existing cul-de-sacs with bicycle and/or pedestrian accessways.

**Action 6.1.4** [sic] Change title 40 and/or road standards to promote pedestrian- and bicycle friendly design through human-scale development and providing comfortable and attractive places.

**Action 6.1.5** Change title 40 and/or road standards to encourage a dense mix of uses and higher-density residential land uses that include provisions for sidewalk and bicycle routes.

**Objective 6.2** Improve bicycle and pedestrian access to nutritious food.

**Action 6.2.1** Prioritize bicycle and pedestrian improvements that provide routes to grocery stores and farmers' markets.

**Action 6.2.2** Encourage grocery stores and farmers' markets to locate along existing bicycle and pedestrian corridors.

**Recommendation 7.** Create policies to increase bicycle and pedestrian access to nutritious food.

**Finding:** Fully adopted

Objective 6.2 and actions 6.2.1 and 6.2.2 address this recommendation (see recommendation 6).

**Recommendation 8.** Design for inexperienced cyclists.

**Finding:** Fully adopted

As discussed under recommendation 1 above, the plan includes action 1.1.4, "Design a variety of bikeway facility types that provide transportation and recreation opportunities for all levels of cyclists with a focus on meeting the needs of inexperienced cyclists." This policy fully embraces the recommendation and marks a departure from earlier drafts, which focused on "Type B" cyclists. As defined by the American Association of State Highway and Transportation Officials, Type "B" cyclists are, "comfortable riding on neighborhood streets and shared-use paths and prefer designated facilities such as bike lanes or wide shoulder lanes on busier streets." The same set of standards identifies type "C" cyclists as children requiring multi-use paths or low-traffic neighborhood streets. Adoption of this recommendation is a step toward universal design and directs agencies to tailor facilities to provide for the needs of a range of cyclist experience levels.

**Recommendation 9.** Include health and equity in project evaluation criteria.

**Finding:** Fully adopted

The prioritization criteria used to select projects was a 100-point scale. Of these 100 points, 20 were allocated to health. In evaluating prospective projects, staff are directed to ask "To what extent does the project increase physical activity, regardless of travel purpose? To what extent does the project improve other determinants of health?" CCPH provided guidance on the allocation of these 20 points, ultimately settling on awarding up to 10 points based on socioeconomic status, 4 for walkability potential, 5 based on street connectivity, and 1 point for "low-stress" facilities such as an off-street trail or bike boulevard.

**Recommendation 10.** *Recognize increased numbers of bicyclists and pedestrians as a safety strategy.*

**Finding:** Fully adopted

Action 4.3.2 is another example of the verbatim integration of the HIA recommendations. It reads, "Recognize increased numbers of cyclists and pedestrians as a safety strategy."

**Recommended 11: Geographic Focus Area:**

*Based on geographic concentrations of people, health outcomes, SES, and built environment characteristics, Public Health recommends focusing on the area south of the I-5/I-205 junction, north of Vancouver city limits, and west of 182<sup>nd</sup> Avenue.*

**Finding:** Fully adopted

The prioritized projects included 10 sidewalk projects, 11 bike lane projects, 11 re-striping projects, and 12 trail segments. Of these, a majority of bicycle projects (15 of 22) and all of the sidewalk projects are within the recommended geographic focus area. Six of the twelve trail/off-street path projects are within the recommended geographic focus area.

## Additional Comments from CCPH

After reviewing a draft plan within the context of the HIA, CCPH submitted over 60 specific comments on the draft. Clark County Community Planning staff responded to all comments, and nearly all were addressed in the final plan. Among the more significant comments that were fully addressed were:

- Include a section of the Plan that documents the planning process
- Change language to indicate commitment and obligate action
- Encourage staff to consider the National Association of City Transportation Officials Cities for Cycling guidelines
- Acknowledge the interaction of transportation and land use by including policies that increase development supportive of walking and cycling. These include: limit construction of new cul-de-sacs, connect existing cul-de-sacs, limit block size, design for imageability, enclosure, human scale, transparency, and complexity, encourage a dense mix of uses, and encourage higher density housing.

The only substantive comment not addressed in the final plan was:

- All goals and objectives should have the following: 1.) Numeric objectives that define a desirable level of service, 2.) Which government agency is responsible for implementation and when, and 3.) Benchmarks and performance measures for assessing progress.

# Impact Evaluation

*How did the HIA influence the decision making process?*

## Background

To understand the way information from the HIA was used in the decision making process, CCPH staff conducted a series of interviews with those involved in the planning and decision-making process. Drawing from a list of 23 county staff, committee members, and elected officials, CCPH staff interviewed seven committee members and all three county commissioners about their experience with engaging health issues during their decision making process. County commissioners made the final adoption decision, but committee members formed the plan in its early stages and were responsible for the fundamental elements and final proposals.

## Interview themes

Key themes from the interviews are listed below.

### *Informants recall exposure to health data.*

Nearly all of the informants recollected hearing about health data, though not many could recall specifics. Some pointed out that they now know where to go if they need specific data.

### *Health information was useful and influenced the plan.*

Several informants mentioned that while health information was useful, the HIA may not be the only way to get it across. Maps were mentioned as a particularly useful way to visualize disparities.

### *The HIA broadened perspectives and increased understanding of the consequences of policy decisions.*

An overwhelming message from the interviews is that having health data available helped to broaden the perspective of those involved and prompted them to consider the impacts of their decisions from many angles.

### *The HIA re-framed the scope of the plan.*

Some informants commented that the HIA helped change the focus of the plan from one that dealt mostly with recreational cycling for current users to one that emphasizes active transportation for future users.

### *The HIA served as a communication tool and rationale for the plan.*

Decision makers were able to use information from the HIA to communicate about the Plan with each other and with the public. Health information was sometimes used to promote the plan, sometimes as a rationale, and on a few occasions was cited in defense of the Plan.



*The HIA exposed equity issues that were not brought up elsewhere.*

Informants reported that in the absence of the HIA, equity would not have otherwise been considered, at least not to the same extent as it was. Some suggested that equity concerns would not have been incorporated into the prioritization criteria if there had been no HIA.

*Public Health was seen as highly credible, and stakeholders' view of Public Health changed as a result of the process.*

There were several stories of committee members realizing what Public Health can contribute to a planning process, and the information provided by Public Health was seen as high-quality and trustworthy.

*The vision laid out in the plan is one of its most important benefits.*

A dominant theme from interviews is that the Plan has many benefits, but that the vision it sets out for Clark County is the most important impact.

*Informants have generally positive feelings about the planning process.*

When asked about the planning process, nearly all of the informants expressed positive sentiments. Some commented that it was well-organized, fair, and open. One committee member shared regret that disadvantaged populations were not engaged to a greater extent.

## What we heard

Below are some samples of the comments we heard in interviews that help illustrate the utility and impact of the HIA.

**The HIA helped to daylight equity issues.**

**Planners from this project are beginning to ask what Public Health can bring to the table.**

**The increased understanding of the importance of health added strength to the document.**

**The HIA was relevant, timely, and really exciting to have as a part of this process.**

**I've evolved as a planner.**

**We didn't have that data available before.**

**The health and socioeconomic benefits and health criteria would not have been in the plan. It wouldn't have even been on our radar.**

**When a citizen comes to me and says, "why are you putting my tax dollars into a trail or sidewalk," it helps to have some data on your side.**

## Impact Evaluation Limitations

A limitation of our evaluation method is the lack of a third-party interviewer. Key informant interviews were conducted by staff who were involved in the HIA. Therefore, some informants may have been reluctant to make critical comments. However, this effect may have been observed regardless of the interviewer, as informants would expect CCPH staff to see their responses at some point. CCPH took steps to ensure objectivity in reporting by involving an additional staff member in each interview to keep an independent set of notes. Despite this limitation, the responses from informants shed light on the value of HIA and provide insights that will inform future HIAs.

Although we evaluated how the HIA influenced the final plan, we have no way of knowing the extent to which the county will implement the plan. Implementing the plan would entail action on the part of the county, such as building sidewalks, sponsoring programs, or passing ordinances regulating street construction. Whether the HIA recommendations are adopted through action remains to be seen. Many will take years to implement, and a lengthy evaluation is beyond the scope of this HIA. Nevertheless, this evaluation provides a useful measure of near-term impacts and a narrative that can be instructive in future HIA efforts.

## Conclusions

As a result of the HIA, the Plan includes projects, programs, and policies that address the interaction of the built environment with social determinants of health. HIA recommendations prompted the inclusion of health and equity as prioritization criteria, which will potentially contribute to a reduction in health disparities related to physical activity. From the analysis of key informant responses, we find that the HIA influenced the planning and decision-making processes, making a positive impact on health. Furthermore, stakeholders found the HIA useful and gave it due consideration when making decisions.

The field of Health Impact Assessment Evaluation is lacking in the depth of relevant literature and examples. The method applied for this evaluation is based on qualitative evaluation methods from other fields, but lacks the support of tested examples from other similar projects. Whereas this evaluation highlights the success of this application of HIA methods, more evaluation is needed to understand the role of HIA in decision-making.

## Acknowledgements

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This report is to inform of county staff, Clark County residents, and others interested in HIA. For a more information, please contact:

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The HIA and supporting documents are available at:  
<http://www.co.clark.wa.us/public-health/reports/facts.html>