SAN FRANCISCO
PLANNING DEPARTMENT

MEMO

Memorandum

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To: Record No. 2015-012094GEN
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RE: **Transportation Impact Analysis Guidelines Update, Bicycling**

INTRODUCTION

The Environmental Planning Division within the San Francisco Planning Department reviews projects for potential impacts on the environment, a process known as environmental review. The department conducts reviews pursuant to the California Environmental Quality Act (CEQA) and Chapter 31 of the San Francisco Administrative Code. As part of environmental review, the department reviews background technical studies, such as transportation impact studies, to assess a project's effects on the physical environment. These background technical studies support the conclusions of the environmental impact evaluation and guide decision-makers during the project approval process. To assist in the preparation of transportation impact studies, the department provides to consultants and city staff a guidance document, the Transportation Impact Analysis Guidelines. The department periodically updates the guidelines, with the last update in 2002.

This memorandum updates the guidance provided in the guidelines prepared in 2002 for the bicycling[1] topic. The department prepared this memorandum in consultation with stakeholders (e.g., city and county agencies, consultants). The department will issue memoranda that provide updates to other topics (e.g., transit, loading) within the guidelines. When the department issues a memorandum about a topic, it will supersede existing guidance regarding that topic.

The guidance provided herein assumes a land use development project located outside of an area plan that requires a transportation impact study. Guidance on other types of projects is discussed below under the "Other" subsection. The department may use this guidance for multiple projects, but the department has discretion on applying the guidance on a project by project basis.

The organization of the memorandum is as follows:

1) Project Description
2) Significance Criteria
3) Methodology – Existing and Existing plus Project
4) Existing Baseline
5) Impact Analysis – Existing plus Project
6) Methodology – Cumulative
7) Cumulative

[1] This memorandum addresses impacts to people bicycling for the purpose of transport, recreation, or exercise.

8) Impact Analysis – Cumulative
9) Other (covers different types of projects)

Appendices are under separate cover. The department may update the appendices to the memoranda more regularly than the body of the memoranda.

PROJECT DESCRIPTION

This section describes project description features, figures, and tables as it relates to people bicycling. This section also describes approvals from agencies other than the department that a project sponsor may need to obtain for those features.

Basics

This sub-section describes the typical physical, additional physical, and programmatic features for existing and project conditions, as applicable. The geographic extent of these features must, at a minimum, include the project's frontage and may include the entirety of the project's block (e.g., if the project is on, or adjacent to, a route identified as part of San Francisco's Bikeway Network and the project proposes changes to that bicycle facility). This sub-section also indicates in bracketed text [ ] whether the presentation of typical physical features could occur in text, a figure, and/or a table. Appendix A provides examples of figures and tables.

Typical Physical Features

The project description must include the following typical physical features to the extent applicable:

- Whether the existing site is vacant, partially occupied, or fully occupied, by use [text, figure, table]
- Type, location, and square footage (gross and total) by land use, building, and total amount [text, figure, table]
- For residential, number of units by bedroom size and percentage of on-site affordable by income level and/or age [text, table]
- For hotel, number of rooms [text, table]
- For student housing, number of rooms and beds per room [text, table]
- For entertainment venues, number of seats [text, table]
- For schools/child care facilities, number of students by age [text, table]
- Location and number of off-street vehicular parking spaces and off-street bicycle parking spaces [text, figure, table]
- Location, number, and dimensions of off-street freight or service loading spaces [text, figure, table]
- Location and dimensions of driveways, including the throat (i.e., area between property line and internal vehicular circulation system) and associated control devices (e.g., gates, stop sign, right turn in/out) [text, figure]
- Location (e.g., distance and direction from intersection), number, and dimension of curb cuts [text, figure]
- Typical dimensions of paved areas between the curb line and property line (i.e., sidewalks), including identifying any curb dimension changes (e.g., cut-ins, bulb outs) [text, figure]
- Location and dimensions of on-street passenger loading (e.g., paratransit, private shuttles) or Muni boarding zones [text, figure]

- Bicycle facilities along the project frontage or within building(s) (e.g., bike share stations or bicycle racks) for people bicycling to and from publicly accessible areas [text, figure]

Additional Physical Features

The project description may include, among others, the following additional physical features to the extent applicable.

- Dimensions of travel lanes and bicycle lanes [text, figure]
- Location and type of bicycle facilities (e.g., class 1 bicycle facility, bike share station, or bike racks) and bicycle facility features (e.g. raised bicycle lanes)[text, figure]
- Location and type of traffic control devices (e.g., stops signs, signals, bicycle-only traffic control devices) [text, figure]
- Location and dimensions of new publicly-accessible right-of-ways (e.g., new street, mid-block alley) [text, figure]
- Sightlines along the project frontage (e.g., due steep slopes or obstructions such as parking spaces, transit stops) [text, figure]
- Existing physical facilities (e.g., drainage grates, manhole covers, railroad crossings, or rumble strips) within bicycle facilities [text, figure (generalized of effective dimensions, do not show or describe each element)]

The department will determine applicability of the additional physical features based upon whether the project would change some of these features and the extent this information may be necessary to inform the impact determination.

Programmatic Features, if applicable

The project description may include the following additional programmatic features to the extent applicable. The department will determine project description applicability based upon whether these features are inherent features of the project, which may typically be considered, or whether they are actions related to project operations that are used to avoid a significant impact (e.g., funding mechanisms), which may typically not be considered:

- Hours of operation of land use [text]
- Hours of operation of loading zone [text]
- Valet, crossing guard, or control officer operations and locations [text, figure]
- Operations of vehicle stackers, elevators, turning tables, etc. [text]

Approvals

The following is a non-exhaustive list of approvals from agencies other than the planning department that a project sponsor may need to obtain for the project description features described above.

San Francisco Board of Supervisors

- Changes that involve establishing a new sidewalk, shared streets, bulb-ins, reductions in the official sidewalk width, or sidewalk widening in excess of one linear block
- Major encroachment permits or any non-standard improvements beyond the limits of the subject property frontage and or/beyond the centerline within the public right of way

San Francisco Public Works

- Sidewalk bulb-outs, corner bulb-outs, or sidewalk widenings not in excess of one linear block
- Installation of physical structures in the public right-of-way (e.g., bicycle racks) along the project frontage

San Francisco Municipal Transportation Agency

- Changes to traffic signals, traffic calming (e.g., islands, bulb-outs, and daylighting), speed limits, and lane striping
- Changes to street rights-of-way (e.g., configuration of travel lanes, sidewalk widths, or addition of bicycle lanes/infrastructure or the addition of crosswalks)
- Changes to off street parking
- Changes in color curb designation on streets bordering the project and/or in the immediate project vicinity

SIGNIFICANCE CRITERIA

San Francisco Administrative Code section 31 directs the department to identify environmental effects of a project using as its base the environmental checklist form set forth in Appendix G of the CEQA Guidelines. As it relates to people bicycling, Appendix G states: "would the project conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian paths?"[2] The department generally uses the following significance criteria to evaluate that question: A project would have a significant impact if it:

1) Creates potentially hazardous conditions[3] for people bicycling; or
2) Interferes with accessibility of people bicycling to and from the project site, and adjoining areas.

METHODOLOGY – EXISTING AND EXISTING PLUS PROJECT

This section describes the typical geography, period, and methodology required to address the significance criteria. The methodology section identifies the collection, generation, and approach to analyze data. The department will determine the appropriate methodology as necessary to inform the transportation analysis.

[2] The Appendix G language shown reflects the State of California Governor's Office of Planning and Research, *Proposed Updates to the CEQA Guidelines*, November 2017.

[3] For the purposes of this memorandum, "hazard" refers to a project generated vehicle potentially colliding with bicycling that could cause serious or fatal physical injury, accounting for the aspects described below. Human error or non-compliance with laws, weather conditions, time-of-day, and other factors can affect whether a collision could occur. However, for purposes of CEQA, hazards refer to engineering aspects of a project (e.g., speed, turning movements, complex designs, substantial distance between street crossings, sight lines) that may cause a greater risk of collisions that result in serious or fatal physical injury than a typical project. This significance criterion focuses on hazards that could reasonably stem from the project itself, beyond collisions that may result from aforementioned non-engineering aspects or the transportation system as a whole.

Basics

Geography

The methodology will typically focus on bicycle facilities (e.g., routes identified in San Francisco's Bikeway Network) on the streets adjacent to the project site and intersections within one block (e.g., 275 to 800 feet) of the project site. For projects that require a transportation study and are greater than 300 dwelling units, 100,000 square feet, and/or 50 off-street vehicular parking spaces, the department may typically extend the methodology to two to five block radius, depending on the size of the blocks and the size of the project. When a project may impact a wide area, the department will select streets and intersections most impacted by the project to represent the impacts that may occur at other locations.

Period

In San Francisco, the weekday extended p.m. peak period (Tuesday, Wednesday, or Thursday, 3:00 p.m. to 7:00 p.m.) is typically the period when the most overall travel happens.[4] Although a substantial amount[5] of travel occurs throughout the day and impacts from projects would typically be less during other periods, the methodology should typically focus on this period (including limiting the hours within the extended p.m. peak period) as changes in travel demand or public right of way would be acute compared to other times of the day and days of the week. In some instances, the most overall travel may occur at different periods (a.m., midday, post p.m. peak, and/or weekend) for smaller geographic areas (e.g., a segment of a street) in existing conditions or as a result of the project, or the project may result in substantial disparity in travel demand at different periods (e.g., special events). In these instances, the methodology may substantiate the use of periods in addition to or other than the weekday p.m. peak.

Data Collection

This sub-section describes the typical methodology for data collection for existing and existing plus project conditions. This sub-section also indicates in bracketed text [ ] whether the presentation of typical methodological elements in other sections of the transportation analysis (e.g., baseline, impact analysis) could occur in text, a figure, and/or a table. Appendix A provides examples of figures and tables.

Existing Conditions

The following identifies the typical methodology for projects. The department will determine the appropriate methodology as necessary to inform the impact determination:

[4] Examples that illustrate this statement: within the San Francisco County Congestion Management Program network transit and vehicular travel speeds are lower during the p.m. peak period (4:30-6:30 p.m.) than during the AM peak period (7:00-9:00 a.m.) as documented in San Francisco County Transportation Authority, *Congestion Management Program*, December 2015; demand at transit stations is consistent and generally higher throughout the p.m. peak period relative to demand at transit stations during the AM peak period, as documented in the Metropolitan Transportation Commission, *Core Capacity Transit Study Briefing Book*, July 2016; the weekday peak period for transportation network companies occurs from 6:30 p.m. to 7:00 p.m., as documented in San Francisco County Transportation Authority, *TNCs Today: a Profile of San Francisco Transportation Network Company Activity*, June 2017.

[5] Throughout this Memo, the term "substantial amount" is used but not defined. This is because what constitutes a substantial amount of people, vehicles, etc., depends on the context in which the project is being evaluated (e.g., existing conditions, proposed land uses, and other variables).

Counts

The methodology should include counts of people bicycling and driving. The methodology may include prior counts collected from other studies or sources combined with (e.g., an average of three different dates with counts at the same intersection, global positioning system user data)[6] or in isolation of counts collected for the project. The use of prior counts must be justified, in consultation with the department. Typically, the use of prior counts may occur if amounts have not changed substantially (e.g., due to lack of new development, circulation changes, or travel patterns). [text, table]

Visual Analysis with Recorded Observations

The methodology should include a site visit for a visual analysis, with recorded observations of the absence, discontinuity, or presence of the features listed in the project description as well as a description of the weather conditions at the time of the site visit. In addition, the site visit must record any existing potential or observed hazards at locations in the study area where people are bicycling, especially if the project site is on or adjacent to bicycle facilities (e.g. routes identified as part of the San Francisco Bikeway Network or a bike share station), or major destinations (e.g., schools, event centers, recreational facilities, tourist activities, shopping districts). [text, figure]

Street Characteristics

The methodology should obtain the following general characteristics of streets within the study area:

- Location and type of traffic control devices (e.g., stop signs, signals, bicycle-only control traffic devices) [text, figure]
- Number of travel lanes by type (e.g., mixed flow, parking, bicycle, transit-only, etc.) [text, figure]
- Posted speed limit and recorded or inferences about observed speeds [text]
- Presence of High-Injury Corridor [text, figure]
- San Francisco Bikeway Network designation [text, figure]

The methodology should obtain the following additional characteristics of streets within the study area to the extent applicable:

- Signal timing and phasing of traffic control devices [text]
- Width of travel lanes [text, figure]
- Number of travel lanes by type at intersections (if different from midblock) [text, figure]
- Length of blocks [text, figure]
- Data regarding the location and causes of collisions (e.g., particular turning movements) [text, figure]

<u>Existing plus Project Conditions</u>

The following identifies the typical methodology:

Travel Demand Analysis

The methodology will estimate the amount of people bicycling and driving from the project. [text, table] In addition, the methodology will distribute and assign the project's vehicle trips to roadways,

[6] Due to steady growth in people bicycling throughout San Francisco, unless conditions change, the use of prior counts should typically not exceed three years.

intersections, loading zones, and driveways to the extent applicable. The methodology should describe bicycling trips to and from the project site, particularly between the project site and major destinations and routes identified in the San Francisco Bikeway Network. [text, figure]

Potentially Hazardous Conditions

The methodology will use the travel demand analysis and project elements to determine if the project would cause potentially hazardous conditions. The methodology should assess to the extent applicable:

- the amount, movement type, sight lines, and speed of project vehicle trips in and out of project facilities based upon the design of such facilities (e.g., curb cut dimensions, roadway speeds) in relation to the amount of people bicycling at those locations [text, figure]
- the location of the project in relation to bicycle facilities (e.g., bike share stations or San Francisco's Bikeway Network)
- the amount and movement type of project-generated vehicle trips into or out of a loading zone across an area frequently used by people bicycling (i.e., supported by counts or observations) or a bicycle facility (e.g., part of San Francisco's Bikeway Network)
- the amount, type (e.g., left turn, right turn), sight lines, and speed of project vehicle turning movements at intersections, including any changes to the public right-of-way that facilitate vehicular movement (e.g., channelized turns), in relation to the amount of people bicycling at those movement locations [text, figure]

Accessibility

The methodology will use the travel demand analysis and project elements to determine if the project would interfere with the accessibility of people bicycling to and from the site and adjoining areas. The methodology should assess to the extent applicable:

- the presence of nearby bicycle facilities (e.g., proximity to San Francisco's Bikeway Network), taking into account the presence of any physical features that obstruct bicycle facilities
- the amount of project vehicle trips, including freight and service vehicle trips, travelling in and out of project facilities and the ability for such facilities to accommodate those vehicle trips in relation to the amount of people bicycling at those locations and nearby streets [text, figure]

EXISTING BASELINE

The existing baseline must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced (e.g., department notification of project receiving environmental review), from both a local and regional perspective. While the existing baseline subsection may repeat existing conditions features described in the project description, the existing baseline will also present (text, figure, or table) the applicable elements included in the methodology as it relates to those features. For example, the project description describes the physical location of an existing curb cut. The existing baseline conditions refers to the physical location of the existing curb cut and describes any existing potential or observed hazards between people driving and people bicycling at the curb cut. In addition, the existing baseline conditions must indicate the date and time for when counts, visual observations, etc. occurred.

IMPACT ANALYSIS – EXISTING PLUS PROJECT

This section ties the project description, methodology, and existing baseline together to address the significance criteria for existing plus project conditions. This section addresses the typical approach for the impact analysis and provides more details related to hazards and accessibility impacts for people bicycling. The impact analysis section should present a format (text, figure, or table) consistent with earlier sections for easy comparison.

Basics

The purpose of the impact analysis is not to exhaustively repeat information from elsewhere. Instead, the impact analysis presents the findings of the analysis based upon the methodology(ies) applied to gather information. The impact analysis must only provide information that is relevant to the significance criteria. For each significance criterion (see below for more details), the analysis must (in the order presented):

1) Address the project's direct and indirect physical changes to the existing baseline conditions. Describe the intensity (e.g., amount of vehicle trips), location (e.g., driveway, particular street), and other project features that may be relevant to address the significance criterion. Be specific (e.g., the project would generate 120 vehicle trips into the driveway during the p.m. peak hour), do not generalize (e.g., the project would generate a modest amount of vehicle trips). The impact analysis shall assume the project will comply with laws and regulations and the analysis shall describe how compliance would occur, what it would entail, and how it may lessen impacts.
2) Identify an impact finding without mitigation: no impact, less-than-significant impact, or a significant impact. Ensure that step 1 substantiates the rationale for that impact finding.
3) If the project would result in a less-than-significant impact, the impact analysis is complete. If the project would result in a significant impact, if applicable, introduce the title of a mitigation measure in paragraph form to reduce the impact.
4) Briefly describe the nexus and rough proportionality to the extent applicable between the mitigation measure and the impact. Briefly describe how the measure would reduce the impact and briefly analyze whether it would have any environmental impacts of its own.
5) If the project would result in a significant impact, identify the conclusion impact finding: less than significant with mitigation, significant and unavoidable, or significant and unavoidable with mitigation.
6) Introduce the title of the mitigation measure. Measure text should clearly explain who is responsible for what and where and when. Mitigation measure text should attempt to reduce the impact below the threshold of significance. If the mitigation measure does not reduce the impact below the threshold of significance, but it still reduces the impact, explain qualitatively how is the impact reduced, and why it is not reduced below the threshold of significance.
7) Introduce analysis provided for informational purposes (e.g., code compliance, see later section regarding details).

Potentially Hazardous Conditions

The impact analysis must address whether the project would create potentially hazardous conditions for people bicycling. Many factors mentioned in the methodology affect the potential for hazardous conditions. The department will determine significance on a project-by-project basis. However, the following examples are some of the circumstances, which may result in potentially hazardous conditions to people bicycling. This is not an exhaustive list of circumstances under which potentially hazardous impacts would occur:

- a project would add a substantial amount of moving vehicle trips (e.g., curb cut width, turning movement) across a bicycle facility (e.g. part of San Francisco's Bikeway Network) used by a substantial amount of people bicycling (e.g., based on counts, or projections)
- a project would construct or be located on a lot with physical obstructions (e.g., trees, utilities, and on-street parking directly adjacent to the curb cut or transit stop) or slopes that would obstruct sightlines between a substantial amount of people bicycling and people driving at high speeds
- a project would add a substantial amount of vehicle trips (i.e., exacerbate) to a turning movement (e.g., left vehicular turn without a protected phase) that is an existing hazard (e.g., High Injury Corridor) for a substantial amount of people bicycling
- a project would facilitate a substantial amount of vehicle trips by removing facilities designed to protect a substantial amount of people bicycling (e.g., plastic safe-hit posts, channelized turns)
- a project would be unable to accommodate[7] vehicle trips, including freight and service vehicle trips, into its off-street facilities thereby blocking access to bicycle facilities for a substantial amount of people bicycling resulting in people bicycling into a mixed-flow travel lane with vehicles travelling at high speed differentials than people in the bicycle facility
- a project would modify a physical feature in the roadway that may create a hazardous condition for a substantial number of people bicycling (e.g., modification of a curb in which people bicycling may strike)
- the amount and movement type of project-generated vehicle trips into or out of a loading zone across an area frequently used by people bicycling (i.e. supported by counts or observations) or a bicycle facility (e.g., part of San Francisco's Bikeway Network)

Accessibility

The impact analysis must address whether the project interferes with accessibility of people bicycling to the site and adjoining areas. Many factors mentioned in the methodology affect the potential for interference with bicycling accessibility. The department will determine significance on a project-by-project basis. However, the following examples are some of the circumstances which may interfere with accessibility. This is not an exhaustive list of circumstances under which potential accessibility impacts would occur:

- a project would be unable to accommodate[8] vehicle trips, including freight loading and service vehicle trips, into its off-street facilities thereby blocking access to bicycle facilities used by a substantial number of people bicycling
- a project places a structure (e.g., large building, right-of-way encroachments) that closes off or renders existing facilities for people bicycling challenging to use, without providing replacement facilities or alternative routes of compatible nature[9], and substantially increases distances for people bicycling to safely connect to San Francisco's Bikeway Network or access neighborhoods and major destinations

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[7] Accommodate refers to design of the facility (e.g., can vehicles be accommodated without queuing based upon throat length, gate location, etc.) and not the capacity (e.g., does the number of spaces accommodate the demand) of the facility as many variables affect the demand to and from a facility.

[8] *Ibid.*

[9] Factors such as incline, volume of vehicles, vehicle speed, and street lighting should be used to assess compatibility of alternative bicycling routes.

METHODOLOGY – CUMULATIVE

This section describes the typical geography, period, and methodology required to address the significance criteria. The section for cumulative only needs to expand upon the methodology section for existing and existing plus project to the extent the methodology differs. The planning department will determine the appropriate methodology as necessary to inform the impact determination.

Basics

Geography

The geography for the cumulative impact analysis will typically be the same as that used for existing and existing plus project conditions given a project would typically only contribute to cumulative impacts to people bicycling in that geography.

Period

The period for cumulative is typically the same as that used for existing and existing plus project conditions except projected out to a future year based upon reasonably foreseeable projects (see below for more details). Future year estimates should typically be between 10 and 25 years. In some instances, the most overall travel may occur at different periods (a.m., midday, post p.m. peak, and/or weekend) as a result of a cumulative project (e.g., a special event center), or the project may result in substantial disparity in travel demand at different periods. In these instances, and in consultation with the department, the methodology may substantiate the use of periods in addition to or other than the weekday p.m. peak.

Cumulative Projects

This sub-section describes the typical methodology for cumulative conditions. This sub-section also indicates in bracketed text [ ] whether the presentation of typical methodological elements in other sections of the transportation analysis (e.g., baseline, impact analysis) could occur in text, a figure, and/or a table. Appendix A provides examples of figures and tables.

List Approach or Projections

The methodology should include future estimates of people bicycling and driving.. To arrive at the future estimates, the methodology may qualitatively describe them, rely on estimates from other studies or sources in combination with the project's study, use a list of cumulative projects in the project study area or vicinity or use travel demand models, such as the San Francisco County Transportation Authority's San Francisco Chained Activity Modeling Process (SF-CHAMP). The methodology must identify which approach the analysis uses and may include a modified approach. [text, figure, table]

The department will decide whether the methodology should use a list-based or projections-based or modified approach. For these approaches, the department typically defines reasonably foreseeable projects as:

List-Based:

- An infrastructure project listed in the latest adopted region's Sustainable Communities Strategy
- An infrastructure project listed in San Francisco's Countywide Transportation Plan, Capital Plan or a San Francisco agency's (e.g., San Francisco Municipal Transportation Agency) Capital Improvement Program

- An infrastructure, private development project, or area plan project is actively undergoing environmental review, recently completed environmental review, or is anticipated to undertake environmental review in the near future because sufficient project definition is established

Projections-Based:

- Land use growth based upon estimates of projections developed in preparation of region's Sustainable Communities Strategy

Modified:

- Any combination of the types of projects described under the list-based and projections-based project types (although projections are typically a compilation of the list-based projects)

Street Characteristics

The methodology must adjust projections or street conditions based on reasonably foreseeable projects. The methodology must document the rationale for adjustments and describe changed conditions, in consultation with the department. Examples include:

- an agency proposes changes to street rights-of-ways such as alterations or reconfigurations of travel lanes, sidewalk widths, and bicycle lanes, all of which may affect the location of bicycle trips to and/or from the project site [text, figure]
- a project proposes placement of a structure that closes off or renders existing facilities for people bicycling to and from the project site challenging to use, which then requires bicycling trips to and from the project site to be rerouted [text, figure]
- a substantially large development project proposes vehicle entrance and exit locations along the route of travel for people bicycling [text, figure]

CUMULATIVE

The cumulative subsection will present (text, figure, or table) the applicable elements included in the methodology.

IMPACT ANALYSIS – CUMULATIVE

This section ties the methodology and description of cumulative conditions together to address the significance criteria for cumulative conditions.

Basics

For each significance criterion for which the project has some impact[10], the analysis must (in the order presented):

1) Address whether the project in combination with reasonably foreseeable projects (i.e., cumulative projects) results in a significant impact. The discussion shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the existing plus project impact analysis. The discussion of cumulative impacts shall focus on the cumulative impact to which the identified other projects contribute (e.g., the

[10] No cumulative analysis is required for each significance criterion if the existing plus project impact analysis found no impact. However, if the analysis found less than significant impacts, then an analysis of cumulative impacts are required for each significance criterion.

examples provided in the methodology – cumulative section) rather than the attributes of other projects which do not contribute to the cumulative impact. The impact analysis shall assume the projects will comply with laws and regulations and the analysis shall describe how compliance would occur, what it would entail, and how it may lessen impacts.

2) Identify an impact finding without mitigation for the cumulative projects: less-than-significant impact or a significant impact. Ensure that step 1 substantiates the rationale for that impact finding.
3) If the cumulative projects would result in a less-than-significant cumulative impact, the impact analysis is complete. If the cumulative projects would result in a significant cumulative impact, identify whether the project's contribution is cumulatively considerable.
4) Cumulative bicycling impacts should use the same methodology as existing plus project conditions, which includes a combination of a quantitative and qualitative approach.
5) If the project would not contribute considerably to the significant cumulative impact, the impact analysis is complete. If the project would contribute considerably to the significant cumulative impact, if applicable, introduce the title of a mitigation measure in paragraph form to reduce the impact.
6) Briefly describe the nexus and rough proportionality to the extent applicable between the mitigation measure and the impact. Then, determine an appropriate mitigation measure considering the project's fair share contribution to impact, after consulting with the department on the appropriate fair share amount methodology. Briefly describe how the measure would reduce the impact, and briefly analyze any potential environmental impacts from the mitigation measure itself.
7) If the project would contribute considerably to the significant cumulative impact, if applicable, identify the conclusion impact finding: less than significant with mitigation, significant and unavoidable, or significant and unavoidable with mitigation.
8) Introduce the title of the mitigation measure. Measure text should clearly explain who is responsible for what and where and when. Mitigation measure text should attempt to reduce the impact below the threshold of significance. The mitigation measure should also describe the project's fair share contribution.

Potentially Hazardous Conditions

The impact analysis must address whether the cumulative projects would create potentially hazardous conditions for people bicycling. The same examples as provided for existing plus project conditions apply here, except for cumulative conditions.

Accessibility

The impact analysis must address whether cumulative projects interfere with accessibility of people bicycling to the site and adjoining areas. The same examples provided for existing plus project conditions apply here, except for cumulative conditions.

OTHER

The guidance provided in this memorandum assumes a land use development project located outside of an area plan that requires a transportation impact study. This section describes the type of additional or different information that may be necessary to address bicycling impacts for the following circumstances: land use development project located within an area plan, an area plan, or infrastructure project. In

addition, this section describes the extent to which a code compliance analysis and/or a discussion of policy inconsistencies may be necessary.

Land Use Development Project Located within an Area Plan

For projects that are consistent with an area plan, pursuant to CEQA Guidelines section 15183, the assessment must limit its analysis to such conditions specified in that section. The assessment must include a project description, discussion of existing baseline conditions (including infrastructure changes), and analysis of existing plus project and cumulative conditions. Typically, the assessment will use the significance criteria and approach identified herein and identify if there are any mitigation or improvement measures applicable from the area plan environmental impact report that should apply to the project. Cumulative impact analysis shall be limited to assess if new cumulative projects that were not known at the time of the EIR certification and, if applicable, any new impacts would occur from those cumulative projects.

As of September 2018, the Planning Commission certified the following area plan environmental impact reports (EIRs) (in order of certification): Rincon Hill, Market & Octavia, Visitation Valley, Balboa Park, Eastern Neighborhoods (Mission, Showplace Square/Potrero, Central Waterfront, East SoMa), Treasure Island, Glen Park, Transit Center District Plan, Balboa Park Station Area Plan, Western SoMa, and Central SoMa. Appendix B identifies mitigation and improvement measures from these abovementioned EIRs related to people bicycling. The department will list mitigation and improvement measures from future area plan EIRs in Appendix B once the Planning Commission or Board of Supervisors certifies those EIRs.

Area Plans

For area plans, the assessment will typically use the significance criteria identified herein. The following sub-sections describe the type of additional or different information that may be necessary to address bicycling impacts for area plan projects, methodology, and impact analysis. For area plans that also include infrastructure changes (e.g., street redesigns), please see the Infrastructure Project sub-section for additional or different information that may be necessary.

Project Description

Typically, the department conducts an analysis to project the amount of future development that could occur in the plan area as a result of its implementation. The department typically does not have all the project description details described herein. However, the project description may include policies that may relate to the methodology and impact analysis (e.g., curb cut restrictions).

Methodology

The assessment will typically use the same methodology identified herein, except the methodology will use a larger geographical study area and require less site-specific information (e.g., driveway locations at each site) except to document circumstances where vehicles may not be allowed (e.g., curb cut restrictions). While an individual project may not require some elements listed in the Methodology – Existing and Existing plus project section, area plans typically will include all of these elements. The department should select sidewalks, streets, and intersections most impacted by the area plan to represent the impacts that may occur at other locations.

Impact Analysis

For analysis of area plans, assess the projected amount of growth and infrastructure changes associated with the rezoning within the area plan boundaries. The analysis of potentially hazardous conditions and accessibility impacts should be similar to that described under the Impact Analysis - Existing plus Project and Impact Analysis - Cumulative sections. If the area plan includes infrastructure changes (e.g., street redesigns), given the potential time gap between land use development and completion of infrastructure changes, the analysis should discuss the potential short-term effects of that potential time gap in a lesser level of detail than that provided for overall effects. However, the analysis should assume individual land use development projects within the area plan would be subject to property specific infrastructure changes (e.g., Better Streets Plan).

Examples of circumstances that would result in significant impacts are described under Impact Analysis – Existing Plus Project.

Infrastructure Project

For infrastructure projects (e.g., new roads, bridge repair, sewer line, rail service, roadway modifications, etc.), the assessment of the project description, significance criteria, and impact analysis should be similar to private development projects. The analysis typically does not require trip generation analysis as infrastructure projects usually do not generate trips.[11] However, some infrastructure projects may induce trips, such as the addition of through lanes on existing or new highways or streets.[12] In addition, infrastructure projects may generate short-term trips due to construction workers and vehicles accessing the project site.

Project Description

The project description must describe the typical physical, additional physical, and programmatic features for existing and project conditions, as applicable. The project description must provide the geographic boundaries of the project and street cross sections.

Methodology

The assessment will typically use the same methodology identified herein, except the methodology will pay particular attention to proposed closures and rerouting.

Impact Analysis

The analysis of potentially hazardous conditions and accessibility impacts should be similar to that described under the Impact Analysis - Existing plus Project and Impact Analysis - Cumulative sections.

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[11] Governor's Office of Planning and Research, *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA,* January 20, 2016.

[12] Generally, minor transportation projects would not result in additional trips. Examples include, but are not limited to, rehabilitation, maintenance, and repair of transportation infrastructure; installation, removal or reconfiguration of non-through traffic lanes and traffic control devices; removal of through lanes; installation of traffic calming measures and wayfinding; removal of on- or off-street parking. Governor's Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA,* November 2017.

Potentially Hazardous Conditions

Examples of circumstances that would result in significant impacts are described under Impact Analysis – Existing Plus Project. The following examples are some of the additional circumstances relevant to infrastructure projects, which may result in potentially hazardous conditions. This is not an exhaustive list of circumstances under which potentially hazardous impacts would occur:

- A project would install an obstruction (e.g., utility covers, streetcar tracks, drain grates, Bay Area Rapid Transit /Muni grates) within or across a bicycle facility used by a substantial amount of people bicycling without adequate space to navigate around or notification measures to alert the people to the obstruction
- A project would modify or introduce a design feature in the public right-of-way that would either directly or indirectly inhibit the ability of people bicycling to safely navigate between various sections of the public right-of-way (i.e., roadway to shoulder)
- A project would include a geometric design feature (e.g., roadway or ramp widening, wide mixed-flow travel lanes, large curb radii) such that a substantial amount of moving vehicle trips would occur adjacent to or across bicycle routes without protection (e.g., buffer, physical feature, speed reductions) between the vehicle trips and a substantial number of people bicycling

Accessibility

Examples of circumstances that would result in significant impacts are described under Impact Analysis – Existing Plus Project. The following example is an additional circumstance relevant to infrastructure projects, which may interfere with accessibility. Accessibility impacts not listed below could occur under other circumstances:

- a project would establish a new physical structure (e.g., at-grade rail service or roadway) which would result in inadequate access for substantial number of people bicycling to and from nearby routes identified as part of San Francisco's Bikeway Network and major destinations (e.g., diverting people bicycling to an incompatible route that would result in an unreasonable increase in incline or distance, or having people wait extensively at crossings)

Compliance with the Planning Code, Policies, and Other Projects

For informational purposes and as an appendix, the analysis must include a Planning Code compliance check as it relates to bicycling conditions. Appendix C provides an example for completing this code compliance check. The following lists the sections of the Planning Code that relate to bicycling conditions:

- Planning Code sections 155.1 (Bicycle Parking Definitions and Standards), 155.2 (Bicycle Parking Applicability and Requirements for Specific Uses), 155.3 (Bicycle Parking Required for City-Owned Properties), and 155.4 (Shower Facilities and Lockers)

In addition, also for informational purposes, discuss whether the project proposes designs for the public right-of-way that would be inconsistent with a reasonably foreseeable streetscape project or plan affecting bicycling conditions. The following examples are circumstances that may result in inconsistencies:

- a project proposes streetscape modifications that are inconsistent with an existing, planned, or proposed streetscape project (e.g., a proposed driveway across a new bicycle facility)
- a project proposes a new driveway/curb-cut located along a bicycling-oriented street that is inconsistent with the Planning Code