



# CITY OF MOUNTAIN VIEW CALIFORNIA STREET/ESCUELA AVENUE/SOUTH SHORELINE BOULEVARD COMPLETE STREETS FEASIBILITY STUDY

Project No. 14-41

Revised Scope of Services

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Prepared by Nelson\Nygaard Consulting Associates



IN ASSOCIATION WITH:

Flint Strategies  
Freedman Tung + Sasaki  
Mark Thomas & Company  
PlaceWorks

TJKM Transportation Consultants



## SCOPE OF SERVICES

The following tasks and associated budget present an outline of the steps required to conduct a Complete Street Feasibility Study for Mountain View's California Street, Escuela Avenue and Shoreline Boulevard south of Montecito Avenue..

### Task 1: Community Values, Issues, & Constraints

#### 1.1 Kickoff Meeting with City of Mountain View and Community Stakeholders

An internal kickoff meeting will be held with the City of Mountain View to review and finalize the scope of work, establish communication procedures, and collect area studies, reports, GIS/AutoCAD data, and other information that will be used throughout the project. The project team will meet with stakeholder groups identified by the City and collectively identify additional stakeholders for engagement later in the design process. The project team, City staff and stakeholders will then brainstorm to clarify member roles, future meeting schedules, initial stakeholder contacts, and potential community meeting locations. We will also confirm contact information and develop consistent graphic elements to be used during the outreach process.

**Deliverable:** Final scope and project schedule

#### 1.2 Pre-Workshop Existing Conditions Tour

We propose that an existing conditions site visit or walking audit be scheduled to occur on the day of the project kickoff meeting, where the Nelson\Nygaard team walks the project corridor with City staff and interested stakeholders. This walking audit will cover California Street between Showers Drive and Bryant Avenue, Escuela Avenue between Latham Street and Villa Street, and Shoreline Boulevard between El Camino Real and Montecito Avenue. It will allow participants to observe conditions and discuss likely areas of concern to users. The kickoff meeting should coincide with the site visit and may function as a debriefing session.

During the walking audit, the project team will conduct an on-site conditions assessment while considering the following general issues:

1. **Connectivity.** Complete streets should provide connectivity, with a fine-grained network that

facilitates direct paths of travel between origins and destinations. This may encompass short block lengths, frequent street-crossing opportunities, and interstitial pathways that do not require people to travel out of their way to reach destinations.

2. **Continuity and Clarity.** Complete streets should provide a continuous network of facilities for all modes. Therefore streets, bicycle facilities and sidewalks should be well maintained, broad enough to comfortably handle expected non-motorized volumes, and should not abruptly end at the most dangerous points in the networks. Traffic elements like crosswalks, lane markings, signage, wayfinding signs, and signals should be clear, consistent, and designed with non-motorized travelers in mind.

3. **Multimodalism.** Complete streets provide access for all modes and help to link effectively to a range of transportation facilities and services. In some cases, this may encompass transit stops, facilities, and priority treatments to provide high quality access to local and regional destinations.

4. **Crossings.** Where travelers reach a crossing, a clear series of design characteristics will be evaluated by our team, including clarity, predictability, visibility, permanence, exposure, and obstructions. Exposure includes crossing distance and traffic speed. Traffic signal displays and timing will also be considered as part of this element.

5. **Safety.** In addition to traffic speed and crossing conditions, other safety considerations include sight distance and sight lines (especially at points of curvature or ascending grade), lighting adequacy, proximity and frequency of curb-cuts, and driveway design.

6. **Accessibility.** To ensure that pedestrian facilities are accessible to all users, ADA requirements should be met and proper consideration given to those with physical or mental limitations. Key aspects include curb ramp and driveway design, sidewalk clearance and surfacing, street crossings, and traffic signals.

7. **Aesthetics and Landscaping.** Aesthetics play an important role in supporting non-motorized users and democratizing public space so that streets are inviting rather than threatening to community life. Trees, landscaping, street furniture, and street frontages can enhance spatial identity, provide shade, create enclosure, and announce crossing environments where motorists should increase their vigilance.

8. Environment. The attractiveness and function of the street is also affected by features such as drainage, percolation, utilities placement, and landscaping.

**Deliverable:** Existing Conditions Audit

### **1.3 Prepare Workshop Materials**

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In preparation for the Community and Stakeholder Workshop, the project team will use the existing conditions information obtained during Tasks 1.1 and 1.2 to prepare visual materials to aid public input of issues surrounding California Street and Escuela Avenue. An accurate base drawing will provide a solid foundation for design. The project team will utilize available drawing information from the City to prepare a scaled base map in AutoCAD for each project area. This will serve as the basis for workshop exploration and the criteria-based corridor alternatives.

**Deliverable:** Large format base maps for workshop activities

### **1.4 Innovative Community Outreach & Stakeholder Meeting(s)**

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The keys to a successful public involvement process are clarity and continuity. Clarity means that the public understands the purpose of the meetings they are asked to participate in, the expected outcome of each meeting, and how meetings relate to one another. Continuity means that there is a logical sequence to the events and that the information is traceable from one event to the next. When these two conditions are met, trust and goodwill are created in participants due to process transparency and understanding of the issues at hand.

For this project, Flint Strategies has designed an outreach and publicity approach to meet the specific needs of the local communities along the California Street and South Shoreline Boulevard corridors. Rather than relying on digital outreach and publicity in English, we will adopt a grassroots approach in which we collaborate with local organizations, meet people at times and locations where they already congregate, and hold a series of mini-workshops along with a more regular community workshop.

Our team understands that there are number of concurrent planning efforts currently underway at the City of Mountain View. We are also mindful of competing time demands (such as multiple jobs

and caring for family members), as well as political disengagement and disenfranchisement, particularly among low-income and minority communities. Our approach is therefore tailored to minimize community burnout and maximize our effectiveness in reaching the most vulnerable members of the community.

Flint Strategies has extensive experience working with groups of minority and low-income populations, and the most successful outreach efforts are those which take the meetings to the people and present “low-key” opportunities for more informal engagement. This has worked well in San Luis Obispo, Napa and Inyo and has resulted in a measurable increase in participation and project understanding within a target population.

#### *Publicity and Collaboration*

During the initial stage of outreach, we will observe where people congregate in the study area, and will contact representatives or active members of community organizations and neighborhood associations to collaborate on appropriate times and places for the main community workshop and the series of mini-workshops. Neighborhood associates include Shoreline West Association of Neighbors (SWAN), Great Streets Rengstorff Park, Community Action Team (CAT), Mariano Castro Neighborhood Association, and Old Mountain View Neighborhood Association.

We will also attend neighborhood meetings, and contact property managers and other community organizations in order to plan and publicize the events.

Publicity will include disseminating bilingual fliers through these organizations as well as at key locations where people already congregate. Examples might include Castro Elementary School, the Day Worker Center of Mountain View, Mountain View Senior Center, Iglesias Ni Cristo (Church of Christ), Iglesias de Dios, Mountain View Buddhist Temple, Mountain View Academy, Rex Manor Safeway, California Court Garden Homes, Zell Associates Property Management (1931 California), Parkview West (255 S Rengstorff Ave), El Portal (2065 California Street), and the informal kiosk at the Escuela driveway to the apartments on California Street.

### *Community Presentations*

Given the unique character of this area, we believe we would be more successful holding smaller more intimate mini-workshops and presentations, coupled with a targeted outreach to homeowners and apartment complex dwellers. The mini-workshops are designed as more informal and social events in the actual places where people already congregate.

In total we anticipate holding up to nine (9) targeted mini-workshops during Task 1: Community Values, Issues and Constraints and one (1) main community workshop open to the public. All materials will be produced and provided in English and Spanish and facilitated in both languages as appropriate. The goal of each of these workshops is to provide information on the complete streets concept, obtain input from the community regarding values, issues and potential alternatives for the study area, and identify potential constraints within the study area. Community values could include items such as traffic speed reduction, pedestrian safety, and bicycle access amenity.

### *eBlasts and Newsletters*

In addition to specific workshops, general outreach includes eBlasts and newsletters to promote upcoming meetings, provide information regarding the update process, and conduct topic-specific surveys. For these efforts, our email database will be merged with the City's stakeholder lists and expanded during the course of the outreach effort. We will coordinate distribution of information via the City's existing channels, working closely with the Public Information Office.

### *Collateral Materials (Bilingual)*

The consultant team will also develop collateral materials for distribution to the public throughout the outreach process. This will include a Project Overview/Fact Sheet, Key Issues Overview, and Meeting Flyers. These materials will also be distributed to local organizations, neighborhood associations, property managers, and businesses.

### *Intercept Interviews*

Our team will conduct intercept interviews over three days at businesses and high traffic locations within the study area. The objective is to collect comments and information from business owners, patrons and commuters regarding their travel behavior, opinions and concerns. Locations may also include Mountain View Community Center / Rengstorff Park.

As a result of the kickoff meeting, initial walking audit and outreach efforts, the project team will develop a list of identified values, issues and constraints. Values will include broad community goals and more measurable community objectives.

**Deliverable:** Workshop materials; List of community values, issues and constraints

## **Task 2: Existing Conditions Survey**

### **2.1 Collect and Review Existing Documentation & Data**

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The Nelson\Nygaard team will review all existing and ongoing planning documents, including the 2030 General Plan and the San Antonio Precise Plan that is currently under development.

Based on the review of the existing data and documentation, the Nelson Nygaard Team will prepare a list of existing data and any gaps in this data. In relation to the identified data gaps, the project team will develop a data collection plan and submit this to City of Mountain View for staff approval. This plan will document data needs for completing this study and procedures for collecting the data.

**Deliverable:** List of existing data and any gaps; Data collection plan

### **2.2 Traffic, Transportation & Urban Design Data Collection**

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Based on the outcome of Task 2.1 we will develop a plan to fill in the data gaps through a range of data collection efforts. Traffic data to be collected or obtained from the City include:

- Traffic volumes for a total of up to ten (10) locations to be determined in consultation with City staff. These volumes are 24-hour bi-directional traffic volumes for seven days along Shoreline Boulevard, California Street, Escuela Avenue, and Showers Drive.
- Peak hour turning movement counts on California Street and Shoreline Boulevard during the a.m. and p.m. peak periods (and potentially Saturday counts). Peak hour turning movement counts will include vehicular, pedestrian and bicycle counts. We anticipate collecting peak hour turning movement counts at no more than fourteen (14) study intersections. It is assumed that for the

remaining study intersections, City of Mountain View will provide us the peak hour turning movement counts.

- Left-turn counts from California Street and Shoreline Boulevard into major driveways (major trip generators), not to exceed eight (8) driveways during the a.m. and p.m. peak periods.

In addition to traffic data collection, other transportation and urban design data collection will encompass the following:

- Future traffic volume as defined in studies, including El Camino Real and San Antonio Precise Plans, VTA Bus Rapid Transit (BRT) Draft Environmental Impact Report Transportation Impact Study, and the City's 2030 General Plan and Supplemental Environmental Impact Reports (SEIR)
- Historic collision reports for last three years along Shoreline Boulevard, California Street, Escuela Avenue, and Showers Drive
- Existing right-of-way maps
- Roadway geometry, including curb-to-curb width and existing width for sidewalk, bike lane, traffic lanes, and median
- Existing transit conditions including bus routes, stop locations and quality of service
- Existing lighting conditions at midblock locations and at intersections along California Street, Shoreline Boulevard and Escuela Avenue
- Safe Routes to School maps
- Landscaping issues

### **2.3 Supplementary Traffic Data Collection**

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If additional traffic data collection is required beyond that outlined in Task 2.3, the Nelson\Nygaard team has added supplementary traffic data collection as a contingency task.

### **2.4 Green Streets Data Collection & Analysis**

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The Nelson\Nygaard team will also gather additional field data first-hand and envision potential design opportunities and modifications in the area of green streets design. Key elements to be evaluated will include, but not be limited to the following: existing grades and drainage patterns, stormwater management, utilities and infrastructure constraints, existing vegetation and plant communities, parking

constraints, safety concerns, maintenance issues, public access and connectivity, unique site features, circulation patterns and accessibility, sun/shade patterns, prevailing winds and microclimates, soil character, and adjacent uses.

### **2.5 Base Maps**

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In preparation for the workshop, the Nelson\Nygaard team will use the existing conditions data obtained during Tasks 2.2, 2.3 and 2.4 to prepare visuals to aid public discussions of issues surrounding California Street, Shoreline Boulevard, Escuela Avenue, and Showers Drive. An accurate base drawing will also provide a solid foundation for design. The project team will utilize available drawing information from the City to prepare a scaled base map in AutoCAD for each project area. This base map will serve as the basis for workshop exploration and the criteria-based corridor alternatives in Task 4.

Although the exact list is flexible and will be determined during the kick-off meeting, the base maps will likely include the following: existing vehicular, walking and biking networks; key intersections and crosswalks; known deficiencies; pedestrian and bicycle amenities; landscape features; and constraints and obstructions. For the green streets component, it is important for the City to provide information on storm drain lines, inlets and underground utilities to detect possible conflicts regarding underground utilities.

**Deliverable: Base map**

### **2.6 Existing Conditions Report**

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The Nelson\Nygaard team will compile all findings from Task 1 and 2 in a succinct report that outlines the existing policy context, existing traffic data, future traffic predictions, multimodal transportation conditions, street right-of-way and roadway geometry data, safety data, landscaping issues, and green streets elements. The report will also document community outreach processes that were implemented as well as public input and survey data that was provided regarding community values and concerns.

**Deliverable: Existing conditions report in electronic format**

## Task 3: Validate Values & Issues

### Task 3.1 Refine Goals & Objectives

Based on the existing conditions assessment and community outreach efforts, the consultant team will refine goals and objectives relating to the project. This process will specifically consider the identified values, issues and constraints obtained in the Community and Stakeholder workshops in order to develop more meaningful and appropriate project goals and objectives.

**Deliverable:** Memo on updated goals and objectives

## Task 4: Design Criteria, Constraints, Alternative Concepts, & Public Meeting

### 4.1 Establish Design Criteria & Identify Constraints

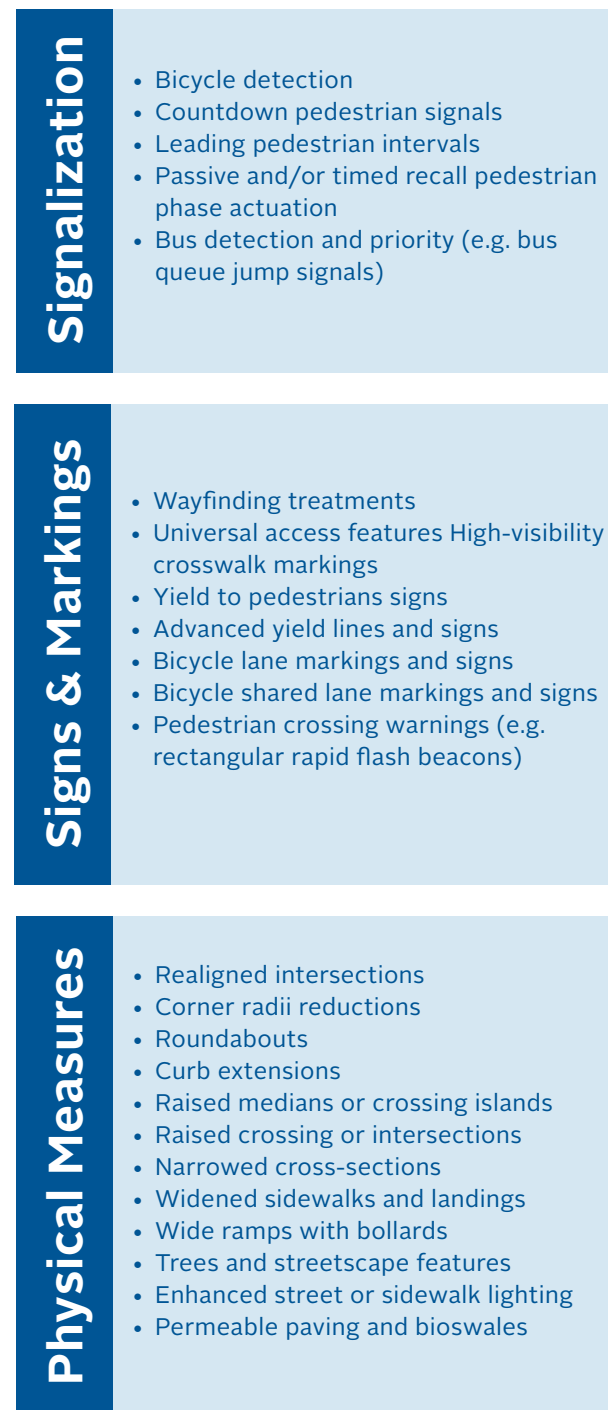
In order to assess alternatives (generated in Task 4.2), the Nelson\Nygaard team will develop design criteria. Design criteria encourage a consistent approach to designing and evaluating each element of the right-of-way to best serve the traveling public, support land use patterns, and encourage economic growth in the City and the region. These criteria will likely include both qualitative and quantitative metrics to objectively measure not just the technical merits of each option, but also the level of community support and feasibility of implementation. The criteria will be developed with input from the City staff and key stakeholders, and may include measures of effectiveness, cost, context sensitivity, community support, and funding opportunities.

In addition to developing design criteria, the consultant team will identify constraints to potential design options. These constraints might include underground elements that preclude certain types of treatments, historic preservation orders, and traffic operations considerations.

### 4.2 Generate Corridor Alternatives

The Nelson\Nygaard team will then develop three (3) packages of criteria-based corridor alternatives or design concepts. Each package of alternatives will address the entire study area, including California Street, Escuela Avenue and South Shoreline Boulevard.

Figure 1 Complete Streets Strategies



The alternatives will be based on community stakeholder ideas and recommendations received during Task 1.4 and Task 2.1, and will draw upon years of practical experience and our national database of best practices. The design team will test potential strategies against the constraints and opportunities identified during the community and stakeholder workshop.

Each package of alternative will propose revisions to existing rights-of-way that are designed to achieve the updated project goals. The design concepts will draw from a toolbox of safety countermeasures and other complete street design treatments, as discussed in the sidebar. One alternative to be considered is a “road diet” on portions or all of California Street and Shoreline Boulevard. Other elements could include bicycle facilities (such as cycle tracks or buffered bike lanes with protected intersection and driveway treatments), travel lane width reductions or lane elimination, enhanced crossings for pedestrians, signal modifications, and dedicated transit facilities along Shoreline. Alternatives will consider placemaking opportunities as well as incorporating concepts that reinforce community land use and urban design elements.

### 4.3 Generate Corridor Alternatives (Green Streets Component)

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In conjunction with Task 4.2, a number of green street alternative concepts will also be developed. The Nelson\Nygaard team believes that the California Street corridor and portions of Shoreline corridor are ideally suited to implementation of green streets elements. The green streets elements will serve to reclaim the residential quality of abutting land uses, while enhancing traffic calming measures and improving the environmental performance of the corridor. Green Streets related alternatives may include:

- Permeable paving in the parking strip, which serves to filter storm water through the ground and therefore reduce the amount of run-off and pollution that makes its way to the Bay. Permeable pavers strips impose little impact on parking supply, while reinforcing traffic calming efforts by visually narrowing the street right-of-way
- Stormwater curb extensions that may be implemented in conjunction with traditional pedestrian curb ramp extensions that are typically located at street intersections. This design intervention provides opportunity to incorporate a rain garden to filter stormwater and often can work in conjunction with an existing stormwater inlet.
- Vegetated swales, which may be located at the back of curbs to filter and convey stormwater in an aesthetically pleasing way. Vegetated swales

(or bioswales) can enhance road diet designs by drawing upon the newly available right-of-way and providing a boulevard aesthetic and separated pedestrian path of travel.

- Stormwater planters such as the traditional deepened curb planters that were first used in Portland. These elements are applicable to Bay Area streetscapes and can accommodate a busier street with opportunities for stormwater infiltration.

### 4.4 Outreach

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The Nelson\Nygaard team will make a presentation to the the Bicycle/Pedestrian Advisory Committee (B/PAC) of the existing conditions and three (3) criteria-based corridor alternatives and design concepts along with initial evaluation and cost estimates that are developed under Task 5. Design alternatives will consist of schematic plans, cross-sections, supporting illustrations, and a brief narrative or bullet points on key features and attributes of each alternative. Those who participated in the initial workshops will be invited to attend this meeting through bilingual newsletters and eBlasts.

### 4.5 Refine Alternatives

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Based on feedback from the B/PAC and other stakeholders, the design team will test potential strategies against the constraints and opportunities identified during the community and stakeholder workshops. The Nelson\Nygaard team will then refine the alternatives accordingly. The design team will explore design concepts graphically using a variety of media and tools, with an increased degree of polish and sophistication as concepts are solidified.

### 4.6 Follow-up Outreach

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After refining alternatives, the Nelson\Nygaard team will provide a final presentation to the B/PAC to communicate design ideas and inform the community on how their feedback is reflected in the California Street and Shoreline Boulevard complete street design.

**Deliverable: Draft and revised complete streets design alternatives**



## Task 5: Evaluate Effectiveness & Cost of Alternatives

### 5.1 Assess Alternatives

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Using assessment criteria developed in Task 4.1, the consultant team will evaluate the effectiveness of the three corridor alternatives. In this assessment, the benefits and impacts of each alternative will be evaluated according to the selected criteria. Evaluation in this phase will be “high level” and primarily include qualitative assessments based on relative merit within each criterion (e.g. “1 – 5” point scale). Alternative assessments screening will be presented in a summary matrix or bulleted list for consideration by B/PAC, stakeholders, and City Council.

### 5.2 Cost Estimates

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The Nelson\Nygaard team will prepare preliminary designs and capital cost estimates for each of the three alternatives. Sketch level infrastructure improvements developed in Task 4 will be rendered using aerial photos to develop 10% drawings, which in turn will be used for the preparation of 10% magnitude of cost estimates. These preliminary estimates will identify the major infrastructural elements such as roadway improvements, traffic signal modifications, drainage, streetscape/plantings, and utility modifications/relocations. While the estimate will strive to include quantities with unit prices, reasonable allowances for items that cannot be definitively quantified will be included as lump sum costs. Unit prices will be obtained from our internal database of recent construction bids and from other resources. Adjustment to the unit prices will be made to reflect current trends with contingency items for future escalation.

### 5.3 Costs Estimates (Green Streets Component)

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Along with Task 5.3, the Nelson\Nygaard team will prepare preliminary designs and capital costs for green streets components of the alternatives. These preliminary estimates will consider permeable paving costs substrates, stormwater infrastructure connections and landscaping.

**Deliverable:** “Preliminary Evaluation of Effectiveness and Costs of Alternatives”

## Task 6: Council Transportation Committee Meeting

Nelson\Nygaard will present the refined alternatives to the Council Transportation Committee, including plans, sections, illustrations and brief narratives on the pros and cons of each alternative. This task includes preparation of materials to present at the CTC meeting as well as attendance by the consultant project manager.

**Deliverable:** Presentation materials for the Council Transportation Committee

## Task 7: City Council Meeting, Study Session, & Regular Meeting

Nelson\Nygaard will present materials for a City Council Study Session and Regular Session. The Study Session presentation will provide updates on the project and community outreach as well as initial alternatives under consideration. The subsequent Council presentation will present refined alternatives with the goal of gaining approval for a complete street design of the corridor.

**Deliverable:** Presentation materials for Council