

APPENDIX A

CIRCULATION SYSTEM MASTER PLAN AND FAIR
SHARE FEE CALCULATION AND NEXUS REPORT

PREPARED BY:

REVENUE & COST SPECIALISTS

*Circulation System
Master Facilities Plan
and Fair Share Fee
Calculation and Nexus Report
for the City of
Newport Beach, California
March, 2010*

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March 19, 2010

Mr. Stephen G. Badum, P.E.
Public Works Director
City of Newport Beach
3300 Newport Boulevard
Newport Beach, CA 92663

RE: *Circulation System Development Impact Fee (DIF) Calculation and Nexus Study*

Honorable Mayor, Council, City Manager and Director Badum:

The City, responsible for providing services to a continually expanding residential and business community, continues to receive private development proposals for the few remaining vacant parcels and property owners wishing to up-size the densities of existing parcels. The City has always absorbed the increased demands for service created by that development and will continue to do so, within the General Plan guidelines. Revenue and Cost Specialists, L.L.C., was contracted to update the existing Circulation System Development Impact Fees, (referred to in Newport Beach as Fair Share Fees). Fair Share Fees are required to preserve the existing *Levels of Service (LOS)* currently offered to and enjoyed by (after having have been paid for by) the existing residents and businesses. The construction of (or a portion of) these additional Circulation System projects is necessary to offset the otherwise eventual diminution of the existing *Levels of Service* due to the addition of new residential and business development. This Study calculates the cost of accommodating the traffic demand generated by increased development, by land-use, associated with the construction of those development-related projects.

The *Circulation System Master Facilities Plan* (Appendix A) identifies a total of \$426,080,797 in needed major street, signal and bridge capital acquisitions required through General Plan build-out within the City's existing boundaries. Ultimate completion of the Circulation System project list is necessary to maximize the City's ability to meet local and regional demands to move people, goods and services throughout the City. The *Fair Share Fee Calculation and Nexus Report* indicates that roughly 32% of the \$426.1 million total Circulation System Plan, or \$137,096,346, is required to finance the projects (or portions thereof) identified as necessary to accommodate the additional 20% in increased circulation system local demands generated by that remaining new development.

The magnitude of the proposed increase to the City's existing Fair Share Fees is a direct function of that net \$136.5 cost (\$137.1 million less the existing Fair Share Fee Fund balance of \$0.6 million) of the Circulation (streets, signals and bridges) System capital projects identified as necessary to support local demands proportionally divided by those generating the new local traffic demands upon the circulation system.

An additional 18% (or \$75.9 million of the \$426.1 million) in Circulation Master Plan costs will be financed from identified capital revenue sources such as inter-governmental support and direct assessments. The remaining 50% or \$213.0 million is required to meet the growing demands from either regional development or to better serve existing development by maintaining or rehabilitating existing facilities. A combination of Gas Tax, Measure M and Proposition 42 revenues will need to be used to address this.

Adoption of the maximum Fair Share Fee (FSF) schedule contained herein and imposition upon the remaining development opportunities in the Newport Beach community, could generate approximately \$136.5 million in a combination of public improvement dedications and revenues for use on the circulation system capital expansion projects deemed as local development-generated. The identification of the net \$425.5 million in capital infrastructure required to maximize the City's Circulation System capacity is not taken lightly. It must be examined in relation to the cost of the City's existing inventory of circulation (street, signal and bridge) system that a new private development project will share in and benefit from, upon approval, construction and finally, occupancy.

To offer the City Council such a perspective, a major element in this Study is a *proportional analysis*. This is a comparison of the amount being asked of future residents and businesses in the form of dedicated public improvements or a Fair Share Fee payment (representing future additional capacity), with the amount currently invested in the City's existing local circulation system infrastructure (representing current capacity), as contributed by the existing population and business community. The dedications, taxes and assessments contributed to date by the existing community over numerous decades of development have generated (or committed to) just under \$1.0 billion (at current replacement costs) in the form of Circulation (streets, signals and bridges) System infrastructure improvements from within the City limits.

It is not intended for calculated development impact fees to address all of the City's capital circulation system needs, especially replacement of aging major streets, signals and bridges. As per California Government Code 66000 et. seq. and common fairness, development impact fees cannot address existing capital deficiencies. Indeed, the Fair Share Fees will only address 32% of the total *Circulation System Master Facilities Plan*. The amount raised by the Fair Share (Development Impact) Fees will be utilized to meet the needs of the City's growing population and business community.

Much of the information required to develop the City's circulation system capital costs and existing equity data was generated or provided by Richard M. Edmonston, P.E., a consultant to the City's Public Works Department. Without his detailed efforts and assistance this Study would have been impossible to complete to the degree of accuracy and completeness that it has. We would also like to thank the City's planning staff for their assistance in providing the land-use database included in this Study.

The *Circulation System Master Facilities Plan and Fair Share Fee Calculation and Nexus Report for the City of Newport Beach* is now submitted for your consideration. RCS staff is prepared to assist in increasing the understanding of this very significant part of the City's Circulation System capital revenue structure.

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott Thorpe', with a horizontal line extending to the right from the end of the signature.

Scott Thorpe,
Senior Vice President

**CITY OF NEWPORT BEACH
CIRCULATION (streets, signals and bridges) SYSTEM**

**FAIR SHARE FEE
CALCULATION/NEXUS STUDY**

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Chapter 1

Background and Introduction

The City of Newport Beach has retained Revenue & Cost Specialists to update the City's existing Circulation System development impact fees. Continued periodic review and adjustment of the Circulation System development impact fees, such as this effort, is appropriate and warranted to insure that the City collects sufficient monies to construct the additional circulation system infrastructure needed to accommodate new residents and businesses developing in the City. The City has traditionally referred to its Circulation System Development Impact Fees as the Circulation System *Fair Share Fees* or as occasionally referred to in this Report as the *FSF*.

This Circulation System FSF Calculation Report differs from previous efforts by the City in that it includes a greater amount of detail such as a list of all projects to be financed by the City's Fair Share Fees.¹ This *Circulation System Fair Share Fee Calculation and Nexus Report* and the *Master Facilities Plan* offer greater information for the Council to make policy decisions, greater understanding by the development community, and an easier tracking (and updating) system for the staff. One additional component of this Report is that it includes a *proportional analysis* of the infrastructure needs required to support continued development of the City as compared to the existing infrastructure. The addition of the proportional analysis will assist the City Council in adopting a fee structure that recognizes inter-generational assets and increases the lay-person's understanding of what is *fair*.

This Report provides documentation of the City's costs which serve as the basis for calculating Fair Share Fees (henceforth referred to as "FSF"). The updated Circulation System Fair Share Fees and related information can be found in Chapter 3 and Appendices A, B and C of this Report.

RCS has met with City contract staff from the Public Works - Engineering to review the supporting data which forms the calculation of FSF. The results of this review can be found on the schedules located at the end of Chapter 3.

Inclusion of the "Proportional Analysis." As stated earlier, this Report includes a *proportional analysis*. This analysis is intended to recognize and reconcile the difference between the City's desired level of service required of new development, per statements in the various General Plan elements, with that of the *de-facto* or actual level of service provided to the existing community. This addition will assist the Council in making the difficult policy decisions regarding the required additions of new development.

Fair Share Fee (FSF) Structure. The FSF is fundamentally based upon the additional trip-miles generated by new development. The General Plan provides a range of potential densities for residential development, as such, the FSF for residential uses need to be calculated on a per dwelling unit basis to reflect more accurately the impacts from a specific development. For example, a property zoned as detached dwelling residential development may contain from three to six units per acre. If fees are calculated on an acreage basis, the developer proposing three units per acre will pay the same amount as a developer constructing six units per acre. Similarly, fees are calculated on a square footage basis for commercial and industrial properties to reflect the impacts of different building intensities for this type of development.

A second reason for the proposed FSF structure recommended in this Report involves the issue of building expansion or intensification of commercial and industrial areas. For example, if a property owner of commercial or industrial property proposes an expansion to his building, the question exists about how to charge this proposed expansion for its impact on the City's Circulation (streets, bridges and signals) System. A fee calculated on a building square footage basis will simplify this calculation. This report uses a condensed list of land-uses with similar trip making characteristics to facilitate fee calculations. The City has historically used a more detailed list of land-uses and will be able to continue doing so based upon data in this report.

CALCULATION OF FAIR SHARE FEES

In California, State legislation sets certain legal and procedural parameters for the charging of these fees. This legislation was passed as AB1600 by the California Legislature and is now codified as California Government Code Sections 66000 through 66009. This State law went into effect on January 1, 1989.

AB1600 requires documentation of projects to be financed by Fair Share Fees prior to their levy and collection, and that the monies collected actually be committed within five years to a project of "direct benefit" to the development which paid the fees. Many states have such controlling statutes.

Specifically, AB1600 requires the following:

1. Delineation of the **PURPOSE** of the fee.
2. Determination of the **USE** of the fee.
3. Determination of the **REASONABLE RELATIONSHIP** between the use of the fee and the type of development paying the fee.

4. Determination of the relationship between the **NEED** for the facility and the type of development project. **NOTE: Numbers 2 & 4 will be reversed throughout the chapters in this Report because it is apparent that need should be identified before use.**
5. Determination of the relationship between the **AMOUNT** of the fee and the **COST** of the portion of the facility attributed to the specific development project.

This Report, with some additions, utilizes the basic methodology consistent with the above requirements of AB1600. Briefly, the following steps were undertaken in the calculation of impact fees for the City and are listed below:

1. Define the level of service needed within the General Plan area for each project or acquisition identified as necessary. In some areas, certain statistical measures are commonly used to measure or define an acceptable level of service for a category of infrastructure. Street intersections, for instance, are commonly rated based on a Level of Service scale of "A" to "F" developed by transportation engineers.
2. Review the land use map and determine the existing mix of land uses and amount of undeveloped and developed land. The magnitude of growth and its impacts can thus be determined by considering this land use data when planning needed infrastructure. The inventory can be found summarized in Table 2-1 and detailed in Appendix B.
3. Identify all additions to the capital facilities or equipment inventory necessary to maintain the identified levels of service in the area. Then, determine the cost of those additions. This information is detailed in Appendix A.
4. Identify a level of responsibility, identifying, as termed in this Report, the relative need (or as referred to in the accompanying schedules as "PERCENT NEED") for the facility or equipment necessary to accommodate "growth" as defined, and as opposed to current needs. It is often based upon the projects ability to create additional capacity for the service supported by the infrastructure. In this case additional ability to move more traffic or at a faster pace by adding infrastructure that adds capacity for more daily trip-miles.
5. Distribute the costs identified as a result of development growth on a basis of land use. Costs are distributed between each land use based on their

relative use of the capital system. For example, future street costs are distributed to each land use based on their trip-mile generation characteristics.

OTHER ASSUMPTIONS OF THE REPORT

In addition to the land use assumptions contained in the next Chapter of this Report, other important assumptions of this study include the following:

"Normal" Subdivision Improvements Omitted. Not included in either of the project lists or consequent calculations are the "local" public improvements generally associated with and identified as being the sole responsibility of the developer through the subdivision or development review process. This type of "on site" improvement would include all capital construction within the boundaries of any development, such as street lights, curb, gutter, sidewalks and neighborhood streets and fully adjacent arterial roadways². These improvements would continue to be the direct responsibility of the developer, with or without the addition of Fair Share Fees.

Land Costs. Land acquisition cost estimates were developed after discussions with City officials. Arguments for higher or lower costs can be made; however, the herein contained per square foot amounts appear to be the appropriate current figure for the purposes of this study. Specific costs have been added for differing projects. Land costs for past dedicated rights-of-way have been included at a nominal \$15.00 per square foot. Right-of-way costs for future projects have been included at \$100.00 per square foot³ with the exception of the area known as Banning Ranch which has been based upon a cost of \$50.00 per square foot.

Exclusion of Tax "Credits" for Undeveloped Land. It has been argued by some that a credit for capital-related revenues, such as gas taxes, should be made against the Fair Share Fees calculated or imposed by a city. Using the state gas tax as an example, proponents of a FSF credit argue that a city will receive increased annual gas taxes because of the additional population generated by future residential development. It is therefore argued that a developer should receive a credit for any associated gas tax revenues collected as a result of the residents or businesses that occupy the new dwellings against any Circulation System Fair Share Fee imposed by the City based on either of two separate arguments.

The first argument for a gas tax credit supposes that the additional gas taxes created by residential development are used to pay for the maintenance of existing streets, which is the responsibility of existing development. Since the new streets constructed via development impact fees will not require rehabilitation or reconstruction for another 10 to 20 years, the gas tax generated by new development is therefore a windfall to the City and should be credited against the FSF. What this argument fails to consider is that any new resident or business to the City will begin to contribute

immediately to the use and deterioration of all City streets. A cursory review of City finances will reveal that the portion of the State gas tax received by cities falls far short of meeting the City's needed street improvements and repairs in any given year. The gas taxes "generated" by new development simply cannot meet the maintenance costs of either the new streets associated with the development or the existing streets which the new resident uses on a daily basis.

The second argument proposes that the developer pays his "full share" of constructing new roads when he pays the City's Circulation System FSF and that the gas taxes generated by his development are unfairly used to make improvements to the existing street system. It is the experience of most municipal agencies that gas taxes are barely adequate to meet streets-related operational costs, and if they are sufficient to meet these costs, the remainder is used for capital-related maintenance projects. Certainly, gas taxes fall far short of addressing the annual depreciation, at roughly \$9.0 million per year, based upon a roughly \$451.4 million replacement value of the Circulation System spine infrastructure (which excludes right-of-way) and a fifty year useful lifetime. As a result, the amount of gas tax revenues used for expansion of the existing street system is usually, and specifically in Newport Beach's case, a very nominal amount of the total. For these reasons, a credit is not considered for Circulation FSF in this Report.

Financing Costs. Since financing costs reflect an actual, and generally significant, outlay of funds for an agency, they are included in the project costs where debt financing is required due to the immediacy of the need for the facility or infrastructure to show the full costs of such facility or infrastructure and insure that new development also pays its "fair share" of these costs. Debt service is a reasonable cost of construction of many, but not necessarily all, public facilities and infrastructure. FSF are collected in incremental amounts, but facilities are not expanded in those same incremental amounts.

However, financing would only be included for facilities where, based upon staff's estimate, the immediacy of need for the facility requires debt financing and no project requiring debt service was identified nor included in the Master Facilities Plan. Should such occur, the Fair Share Fees should be recalculated to recognize annual debt payments.

REQUIRED PROPORTIONALITY TEST

A test for proportionality is important, if for no other reason than because it attempts to achieve community inter-generational assets, i.e., fairness in balancing the infrastructure investment made by existing residents and businesses with the investment asked of new residents and businesses that will benefit from the existing infrastructure. In short, previous generations of businesses and residents have contributed to the development of the City's existing infrastructure and this fact should be recognized by future residents and businesses by contributing a like (but no more than) amount towards completing the various infrastructure systems.

It is one thing to identify the many public improvement projects needed through build-out. It is an entirely different thing to assume that all of the identified improvements are required to meet the demands of the new development. None of the proposed projects are *replacement projects* of the existing infrastructure, they are all traffic system *capacity increasing* projects. Within the category of the latter described projects, those that are *capacity increasing*. These may be further classified into two categories;

1. Projects that are required as a result of *local* development. An example of this would be an intersection where traffic flow is currently controlled quite adequately by stop signs, but because of development in the near and "downstream" areas, will ultimately need to be signalized.
2. Projects (or portions thereof) that *are not* required to accommodate local development. They are either existing deficiencies, i.e., projects required regardless of whether there is additional development or not or deal with increasing regional demands. An example⁴ would be an existing intersection where traffic flow is currently inadequate (or marginally so) and needs to be improved to provide additional lanes (capacity) for existing users. An additional example would be a project (or portion thereof) required to accommodate traffic expected to *pass-through* the City's limits on one of its major roadways. These costs have been separated from the proposed capital costs required to accommodate new *local* demands.

All development impact fee calculations claim to be fair, but few offer actual evidence of such fairness. Most FSF calculations will simply identify the desired or needed capital projects, ostensibly required *as a result of the new development*. The issue can be difficult and complex. Therefore, what is fair and equitable? Is it fair to require future residents and businesses in a city to construct, via payment of Fair Share Fees, a new police station when the current station is merely rented or leased space? On the other hand, if a community already has all of the parks they will need at build-out, are they precluded from imposing an impact fee to recoup some of the expenses incurred in constructing the maximum needed park improvements prior to the maximum demand? These are difficult questions that may be made clearer and easier by reviewing the following examples.

Comparison of Needed Infrastructure with Existing Infrastructure. The answer to these difficult questions may best be answered by comparing various infrastructure scenarios. This can be accomplished by looking closely at our friends in the planned community of Happy Valley⁵ for a few scenarios to explain the three possible conditions that can occur regarding the agency's current infrastructure and the demand upon them. For purposes of this example, this report will use the provision of fire suppression services, a service that most of us as nonprofessional firefighters can somewhat understand, to identify some of the issues.

These three "conditions" include, the fire suppression system infrastructure construction:

1. is *On-target*,
2. has been *Deficient*, or;
3. has created *Excess Service Capacity*.

Adoption of a Standard - According to the Happy Valley General Plan Public Safety Element fire station planning standards, a basic two-bay fire station (estimated for purposes of this example to cost about \$3,000,000) will meet the needs of 5,000 homes or 10,000,000 square feet of business pad. If these standards were adopted as Happy Valley's public safety element of the City's General Plan, they would be known as the *de jure* or stated (or desired) standard (i.e., the standard the community would like to meet). The inductive impact fees (or cost per proportional unit served) for this *de jure* standard would then be:

**Table 1-1
Calculation of Development Impact Cost**

Land Use	Station Cost	Units Served	Impact Fee
Residential Units	\$3,000,000	5,000	\$600.00 per home
Business S.F.	\$3,000,000	10,000,000	\$0.30 per S.F.

Service Base - Happy Valley's General Plan indicates that there will be 10,000 residential units and about 20,000,000 square feet of commercial/industrial space creating a need for four stations at build-out. The calculation identifying the number of required stations is as follows:

**Table 1-2
Determination of Required Number of Stations**

	Number of Units	Units served by One Station	Stations Required
Residential Units	10,000	5,000	2 Stations
Business S.F.	20,000,000	10,000,000	2 Stations
Required Stations at General Plan Build-out			4 Stations

Infrastructure is "On-target" - The need for four stations appears simple and the Happy Valley Council need only impose the impact fees identified in Table 1-1. Currently, Happy Valley has 6,250 residential units and 7,500,000 square feet of commercial/industrial building pad and is half "built-out" (in terms of fire calls-for-service). The existing development in Happy Valley is generating half of its ultimate (General Plan build-out) fire calls-for-service. This is demonstrated in Table 1-3 following:

**Table 1-3
Development of Current Infrastructure is "On-Target"**

	Number of Units	Units served by One Station	Stations Required
Residential Units	6,250	5,000	1.25 Stations
Business S.F.	7,500,000	10,000,000	0.75 Stations
Total Number of Fire Stations Currently Required			2.00 Stations

Conversely, Happy Valley has the remaining half of its fire demand (in terms of calls-for-service) yet to come. Left to build are 3,750 detached dwelling units and 12,500,000 square feet of business floor space, and when constructed would generate the following capital needs identified on the following Table 1-4:

**Table 1-4
Remaining Development and Station Requirement**

	Number of Units	Units served by One Station	Stations Required
Residential Units	3,750	5,000	0.75 Stations
Business S.F.	12,500,000	10,000,000	1.25 Stations
# of New Stations Required from Parcels to be Developed			2.00 Stations

If the earlier calculated impact fees (\$600 per residence and \$0.30 per square foot of business pad) were adopted and imposed, Happy Valley would collect (by General Plan build-out) enough capital revenues to construct the remaining two stations and proportionality between existing and future residents and businesses would be evident. Table 1-5, following, demonstrates this:

**Table 1-5
Remaining Development Impact Fee Collection**

	Number of Units	Impact Fee	Amount Collected
Residential Units	3,750	\$600.00	\$2,250,000
Business S.F.	12,500,000	\$0.30	\$3,750,000
Amount Collected in Fair Share Fees			\$6,000,000
Cost of a One New Fire Station			\$3,000,000
Stations to be Built with Fair Share Fees			2.00

And everyone in the community of Happy Valley is adequately served by the four stations having been financed generally fairly by the total community.

Infrastructure is in Deficient Condition - Consider, however, the implications if the current Happy Valley residents and businesses had shown the earlier limited commitment to contribute only enough financing to construct one station when, based upon their own adopted standards and level of development, they should have two stations? Clearly three more stations would be needed on the path to General Plan “build-out.” Initially, we can easily dismiss as completely inequitable the possibility of requiring the remaining future home and business owners to finance all three remaining stations. But would it be fair and equitable to charge new residents the \$600 per home and new businesses the \$0.30 per business square foot in order to build the remaining two stations required to meet the planning standards?

The simple and direct answer is no. The Happy Valley community has not (with only one station constructed at half build-out) demonstrated their full and complete commitment to meeting the General Plan Public Safety Element standards, and as a result would not have a strong case to assert that others who build after them need to contribute towards the construction of multiple (two) fire stations at a higher service rate by including the “missing” second station.

The service provided by the single existing station is the community's *de facto* (or "in fact") standard service level. With one station, the contributed assets to build the single station would be half of the impact fee proposed in Table 1-1, or \$300/residential unit and \$0.15/square foot of business space, respectively as identified in Table 1-6, following.

**Table 1-6
Impact Fee at Deficient Condition**

	Number of Units	Existing Contribution	Amount Collected
Residential Units	3,750	\$300.00	\$1,125,000
Business S.F.	12,500,000	\$0.15	\$1,875,000
Amount Contributed by Existing Community			\$3,000,000
Cost of One New Fire Station			\$3,000,000
Station(s) built with Community's Contribution			1.00

If Happy Valley has only built one station at half General Plan build-out, we would be forced to conclude that the City is currently *deficient* by one station. If the future residents were asked to pay at a rate that would build two stations (the \$600/\$0.30 rates) the City would have three stations at General Plan build-out, one financed and built by the first half of the community, and *two* financed and built by the second half of the community. The first half of the community would, in effect "inherit" one half of a station at no cost to themselves. In short, Happy Valley would fail the proportionality test. The inequity would then be exacerbated when the community decides to build the final "missing" last station (of four) from a City-wide assessment or from annual General Fund receipts, paid for by the entire community, including those who just paid for the two new stations via the adopted fire suppression development impact fees.

The only truly and completely equitable option is for the City to adopt impact fees at the \$300/residence and \$0.15/square foot rates. Adoption of this fee would be referred to as the *Community Financial Commitment or Asset-based Impact Fees*. Admittedly, the City will go further into a deficit position in terms of the number of required stations, from being deficient by one station at half General Plan build-out to a deficiency of two stations at General Plan build-out, *but the ratio of deficiency (or overall proportionality) would remain a constant 50% of the stations needed at either time*. The community, if they are truly serious about meeting the General Plan

recommended fire station standard, would then need to assess the entire community to raise the needed money in some fashion for financing the remaining two stations either in the form of an assessment or dedication of general receipts of the City.

Infrastructure - “Excess Capacity” - One final but important scenario remains and must be considered. In this scenario the existing residents of Happy Valley were the industrious sort and (at half General Plan build-out) had constructed three stations when they were at the point when they only needed two stations. Clearly there is excess capacity in each of the three existing stations. In this case, the Happy Valley's current *de facto* standard would be well above the *de jure* or target standard. Statistically, each of the three stations would have 1/3 excess capacity (for providing services) and should be busy only about two-thirds of the time. Should the impact fee be limited only to the marginal \$300 per residence and \$0.15 per business square foot required to construct the one remaining required station? If so, the future residents receive a gift of the extra (third) station. There will be tough decisions ahead to be made by the Happy Valley City Council.

Marginal or Recoupment Fee? The Happy Valley City Council should adopt, *at a minimum*, the \$300/residence and \$0.15/square foot business space rates to insure that the fourth station would be built. This would be referred to as the *marginal needs-based* fee. This would be a benevolent gesture, giving the new residents a free ride on the cost of the (already built and paid for) third station.

Or in the alternative, the Council can recognize that the \$3,000,000 used to build the third station was a loan from the existing community's General Fund receipts, and needs to be repaid by the future community receiving an instantaneous level of fire protection the day they receive their occupancy permit⁶, through the imposition and collection of impact fees.⁷ In this case, the \$600/residence and \$0.30/square foot of business space impact fees should be adopted, imposed and collected. The impact fee would accumulate \$6,000,000 through build-out, with \$3,000,000 required to repay the General Fund in delayed revenue (for Station #3) and \$3,000,000 necessary to construct the fourth station. This would be referred to as the *recoupment-based* at General Plan build-out fee. And more importantly, at General Plan built-out, long term equity would be achieved as each home and business would have contributed the same \$600 per residence and \$0.30 per square foot.

Exceptions to Proportionality Test. The previous discussion applies particularly well to above ground or facility-based services such as public-use facilities, pools, police and fire stations, civic centers, maintenance yards or other fixed location and fixed capacity facilities that serve the entire population. However, it does not necessarily work well on ground level or below *system* infrastructure such as streets, utilities, and storm drainage, where the continuation of a deficient system into the future is not at all possible and the lack of additions would ensure the complete inability to approve any further private construction without creating unsafe conditions to a

specific area. As an example, if the agency's storm drainage system is currently deficient and creates some periodic flooding but not necessarily in dangerous amounts, the agency may not be able to approve and allow any more future development unless the storm drainage run-off created by the new development, is properly collected and released at a river or flood control channel.

Specific Plan or Benefit to a Specific Area. An additional exception occurs when the need or benefit from a specific facility is generated by a finite or easily defined area such as a specific plan or a new area of the agency that is significantly outside of the existing agency's urban in-fill service area or the specific plan is primarily the sole beneficiary of the infrastructure to be constructed. An example may be a small area of the City, proposed for say 2,000 homes, but separate from the rest of the City in such a way that, to meet the General Plan's stated fire suppression standard level of service of a five minute response time, it requires a separate fire station but serving less than any of the other stations, which on average serve 5,000 homes. There is little argument as to why the remaining residents and businesses should not need to finance that higher cost per home served. This is not uncommon in an area geographically separated from the major, or urban, part of the community. An example would be a small area separated by a river or up on a hillside or in a canyon.

Density may also be a factor. Circulation infrastructure system improvements to date may be spread over a more compact density (say 6-7 homes per acre) than the remaining development in town (say 2-3 homes per acre). Most likely, the expansion of any infrastructure, circulation systems included, will cost more per home for the lower densities and will be far higher than the infrastructure costs required to serve the more compact but higher density homes.

Such equity is the attempt of this Report. Excess capacity is often difficult to identify and even more difficult to convince others of. The City is probably much like Happy Valley, with excess or overcapacity in some areas of infrastructure, and perhaps slightly deficient⁸ in others.

CHAPTER ORGANIZATION

Within the Circulation System Chapter there will be a minimum of three cost/fee tables. They are:

The first schedule, 3.1. the *Allocation of Project Cost Estimates* identifies the project, its costs and the relationship, in a percentage, to development.

"Marginal Needs"-based Impact Fee - This schedule will identify the impact fees that would need to be adopted to meet the basic capital needs identified in the Report (on the first schedule at the end of the Chapter, i.e., 3.2) for that infrastructure.

With adoption of this level of impact fees, one could claim that *new development is occurring*

*without any additional cost to the existing residents and businesses. You could not, however, claim that *new development is paying its "fair share."**

Existing Commitment or "Asset"-based Impact Fee - This schedule will identify the cost (in current nominal dollar value) of the existing infrastructure, including land, physical improvements and capital equipment. This is the average amount that has been "invested" by the current community of residents and businesses. These assets will be expressed in terms of the cost to construct or acquire the assets at current costs.

If the average "asset" (for detached dwellings for example) on this Table is greater than the average cost on the previous "Marginal Needs" Table, then the infrastructure system is "front-ended" or has excess capacity. Earlier residents and businesses of the community have put more of the system into place than will the remaining unbuilt portions of the community, (as they build). The existing community has advanced money to build capacity into the infrastructure system to meet the needs of residents and businesses not yet there! The scenario where Happy Valley had already built three fire stations while it only had the current demands for two stations is an good example of a *front-ended* system.

Adoption of this level of impact fee would allow the City to claim that *new development is not being required to pay to eliminate existing deficiencies.*

[This space left to place the Chapter endnotes on a single page].

CHAPTER ENDNOTES

1. For greater detail of each project, refer to the City's *Master Facilities Plan (Appendix A)*.
2. Public agencies are authorized to require such improvements under the Subdivision map Act.
3. This land-acquisition value has been determined by the City's circulation system consultant that prepared the cost estimates and then confirmed by a local commercial real estate appraiser.
4. Examples using other infrastructure will be used from time to time in this report, though pages 6 through 12 are limited to Fire Suppression Facilities, Vehicles and Equipment.
5. "Happy Valley" has been used as an imaginary community for purposes of DIF example for about fourteen years. Clearly no insult is intended to any real or imagined community of Happy Valley. It is also a Happy Valley because there is no inflation and the value of a dollar remains nominal.
6. Actually, the permitted structure receives fire protection services as it is being constructed.
7. This example assumes that each of the existing three stations is debt-free and owned out-right.
8. Not necessarily in a manner that indicates a danger, just below the standard being asked of the future residents.

Chapter 2

Demographics and Findings

This Chapter provides an inventory of existing development and remaining development opportunities within the City and presents a summary of recommended Fair Share Fees detailed in the following chapter of this Report. The City still possesses a few sizeable areas of vacant land zoned for residential, commercial lodging, business and special uses. The City also anticipates redevelopment will occur in some of the currently developed area. In some cases this redevelopment, or up-sizing is expected to be more traffic intensive than the use it replaces which will add to the demand for increased roadway (trip-mile) capacity.

LAND USE ASSUMPTIONS

The undeveloped/underdeveloped land use inventory forms the base for distribution of the estimated costs of impacts from new development. The developed land inventory forms the base for distributing the cost of the existing infrastructure for comparison and for the *de facto* identification of the existing levels of service (LOS) provided by those existing infrastructure.

Land Use Definitions. This Report classifies properties as either one of five residential land uses or several different categories of business development. These land uses are defined below:¹

- **Residential Land Uses** include: Low Density Dwellings, Medium Density Dwellings, Apartment Dwellings, Mobile Home Dwellings and Elderly Residential Dwellings. These developments will be costed in terms of complete residential units.
- **Commercial Lodging** includes hotel, motel and business suites. These developments will also be calculated in terms of units.
- **Business/Commerce Land Uses** include: Restaurants, Regional Commercial, General Commercial, General/Medical Office, Industrial and Warehouse uses. These private developments will be costed in terms of square feet.
- **Specific/Unusual Uses** include: Hospital uses (beds), Commercial Recreational (acres), Newport Dunes (acres) Tennis Clubs (courts) and marina's (slips).

Table 2-1, following, provides an inventory of all private land uses contained within the current City limits. These figures are based on the General Plan's land use inventory and a staff analysis of privately held parcels². The City's recent General Plan update utilized 42 land-use categories development³. For purposes of this Report, these forty-two specific sue categories have been

aggregated into fifteen broader categories. This will allow the City to use the development impact cost information, which is based upon averages, for application upon many more specific uses that are allowable uses within the fifteen broader categories. The detailed land-use database can be found in Appendix B at the end of the Report.

**Table 2-1
Detailed Land Use Inventory**

Total – Entire City	Existing Development # of Units	Anticipated Development # of Units	Total G.P. Development # of Units
Low Density Dwellings	18,702	1,321	20,023
Medium Density Dwellings	10,974	4,696	15,670
Apartment Dwellings	9,703	5,374	15,077
Mobile Home Dwellings	600	(145)	455
Elderly Residential Dwellings	200	120	320
Commercial Lodging Units	3,365	2,221	5,586
Restaurant S.F.	115,090	57,760	172,850
Regional Commercial S.F.	1,331,000	288,525	1,619,525
General Commercial S.F.	4,098,787	1,600,397	5,699,184
General/Medical Office S.F.	13,129,386	385,720	13,515,106
Industrial S.F.	1,291,079	(143,630)	1,147,449
Warehouse S.F.	196,420	1,000	197,420
Hospital Uses (beds)	1,692	377	2,069
Comm. Recreational (acres)	69	0	69
No Other Category (units)	1,115	2	1,117

Definitions of Land Use Status. For each of the major land use categories detailed above, land is categorized as either *Developed* or *Undeveloped*. Definitions regarding the status of each land use are as follows:

Existing Development (# of Units) - Includes land in the City which is fully developed and is in conformance with the zoning designation for that area, or land which has received a building permit but which is not yet constructed. Units in this category may also include non-conforming use areas of the City which contain extensive development prior to annexation or before changes to the General Plan were made.

Anticipated Development (# of Units) - Refers to all non-public vacant acreage located within the City. This category also includes any largely vacant properties anticipated to be redeveloped in the future.

SUMMARY OF FINDINGS

City staff has identified just over \$426.1 million in needed and desired Circulation System capital improvement projects required through the City's General Plan build-out, including both projects related to existing deficiencies and those needed solely to support future growth. Based on these costs and the schedules found at the end of Chapter 3 of this Report, the portion of the total costs attributable to future local development (\$136,501,346) were derived on a per unit basis for residential land uses and on a per square foot of space basis (includes multiple floors) for business land uses. The fees are summarized in Table 2-3, following:

Table 2-3
Summary of Recommended Circulation System
Fair Share Fees (FSF)

Land Use	Recommended Fair Share Fees
Low Density Residential	\$9,578/Unit
Medium Density Residential	\$7,210/Unit
Apartments	\$6,857/Unit
Mobile Homes	\$5,197/Unit
Elderly Residential	\$6,256/Unit
Commercial Lodging	\$6,355/Unit
Restaurants	\$30.455/S.F.
Regional Commercial	\$15.446/S.F.
General Commercial	\$14.862/S.F.
General/Medical Office	\$14.774/S.F.
Industrial Uses	\$7.705/S.F.
Warehouse Uses	\$6.362/S.F.
Hospital Uses	\$11,734/Bed
Commercial Recreational	\$17,677/Acre
No Other Category	\$2,828/Unit

Distribution of Circulation System Costs. During the City's most recent General Plan Update it was determined that half of the future traffic increase will be the result of regional growth, as such, this amount would not be assessed to locally-generated development. An additional 18% of the total circulation system project costs will be financed with a combination of direct assessments upon adjacent development, support from neighboring and regional agencies and previously required mitigation measures and City revenues for existing deficiencies. The percentages applicable to each project are indicated on the project detail pages in the *Master Facilities Plan* Appendix A. In addition there is roughly \$0.6 million available in existing City Circulation System Impact Fee fund balances available for appropriation to these projects.

Combined, Schedule 3.1 indicates that roughly 18% of the total Circulation System Master Plan cost will be financed by other revenue sources that are identified on the individual *Master Facilities Plan* project detail pages in Appendix A. The adoption of the recommended maximum Fair Share Fees supported by the calculations in this Report (Schedule 3.2) combined with the existing Circulation System Impact Fee fund balance would, raise some \$136.5 million or roughly 32% of the total *Circulation System Master Facilities Plan* costs. However, even if the Fair Share Fee schedule is adopted, the remaining \$213.0 million in capital revenues, or 50% of the total costs, identified as regional demand related, would need to be collected from other less direct revenue sources. A combination of Gas Tax, Measure M and Proposition 42 revenues will need to be used to address this shortfall. Given the regional competition for such revenues, a number of other projects will likely remain underfunded over a long period of time.

Schedule 2.1, identifies the individual and total Fair Share Fee schedule by land-use and provides a calculation of the potential collection through build-out at the proposed *Marginal-needs* Based Fair Share Fee rates and the cost of the total infrastructure needs, and is the recommended Fair Share Fee schedule for adoption.

FORMAT OF THIS REPORT

The following format of this Report contains the detailed information relative to the calculation of the Circulation System Fair Share Fee (FSF) schedule recommended by RCS for the entire City. Appropriate textual explanation is contained within that chapter, with appropriate cost schedules, listed below and three appendices.

CHAPTER 3 - Circulation (Major Streets and Bridges) System

APPENDIX A - Circulation System Master Facilities Plan

APPENDIX B - Detailed Land-use Database

APPENDIX C - Detail of Trip-miles Calculation by Land-use

NOTE REGARDING TEXTUAL MATHEMATICS: *It is important to note that the use of a computer provides for calculations to a large number of decimal points. Such data, when included in text and supporting textual tables, has been rounded to no more than two decimals for clarity and thus may not match the spreadsheet schedules at the end of each chapter to the same degree. Should there be any difference between tables within a chapter and the schedules at the end of the same chapter, the schedules shall prevail.*

CHAPTER ENDNOTES

1. *City of Newport Beach General Plan Transportation Study City Council Adopted land Use Scenario; Table 1.*
2. The figures are consistent with the most recent Land Use Element and General Plan Update. The land-use figures are based upon a time-frame of post-2025 including full build-out of land-use in Newport Beach. It is understood that some of the permitted land-use development may not occur in that time frame, but a definite planning horizon needs to be used and there are no known development levels or street improvement dates for interim years.
3. The City will be able to apply the fee structure to as many land-use categories as they feel necessary and appropriate.

Schedule 2.1

City of Newport Beach
 2009-10 Fair Share (development impact) Fee Calculation and Nexus Report
 Impact Fee Summary and Potential Collection
 Circulation (Streets, Signals and Bridges) System

Land Use	Potential Units/S.F.	Fee per Unit or S.F.	Potential Revenue
Low Density Dwellings	1,321	\$9,578	\$12,652,538
Medium Density Dwellings	4,696	\$7,210	\$33,858,160
Apartment Dwellings	5,374	\$6,857	\$36,849,518
Mobile Home Dwellings	(145)	\$5,197	(\$753,565)
Elderly Residential Dwellings	120	\$6,256	\$750,720
Commercial Lodging Units	2,221	\$6,355	\$14,114,455
Restaurant S.F.	57,760	\$30.455	\$1,759,066
Regional Commercial S.F.	288,525	\$15.446	\$4,456,514
General Commercial S.F.	1,600,397	\$14.862	\$23,785,388
General/Medical Office S.F.	385,720	\$14.774	\$5,698,498
Industrial S.F.	(143,630)	\$7.705	(\$1,106,618)
Warehouse S.F.	1,000	\$6.362	\$6,362
Hospital Uses (beds)	377	\$11,734	\$4,423,718
Comm. Recreational (acres)	0.10	\$17,677	\$1,768
No Other Category (units)	2.00	\$2,828	\$5,656
Potential Circulation System Development Impact Fee Revenue			\$136,502,178
Total "Build-out" Circulation System Infrastructure Needs			\$426,080,797
Less Existing Fair Share Fee Fund Balance			(\$595,000)
Net Circulation System Infrastructure Needs			\$425,485,797
Amount to be Financed by Other City Revenue Sources			(\$288,983,619)

Chapter 3 Circulation System (Streets, Signals and Bridges)

The following Chapter will discuss the circulation improvements planned for the City through build-out of the City's corporate limits as identified in the Land-use Database Table in Chapter 2.

The Existing System. The City currently has and maintains an extensive circulation system available for the transportation of goods and services, as well as for educational, recreational, and social purposes. Streets that fall under the jurisdiction of the City of Newport Beach would be typically classified as one of five common types of roadways (excludes "locals"). The City's General Plan Circulation Element Roadway Classification System specifically contains these various roadway type definitions¹ and they are generally described as:

- **Principal Arterial** - A Principal arterial highway is typically an eight lane divided roadway. A Principal arterial is designed to accommodate a daily capacity ranging from 60,000 to 73,000 with a typical daily capacity of 68,000 vehicle per day (VPD). Principal arterials carry a large volume of regional through traffic not handled by the freeway system.
- **Major Arterial** - A Major arterial highway is typically a six-lane divided roadway. A Major arterial is designed to accommodate a daily capacity ranging from 45,000 to 67,000 with a typical daily capacity of 51,000 vehicles per day. Major arterials carry a large volume of regional through traffic not handled by the freeway system. A Major Augmented is similar to a Major arterial, but may include additional lanes, particularly at intersections, resulting in a daily capacity ranging from 52,000 to 70,000 with a typical daily capacity of 58,000 vehicle per day.
- **Primary Arterial** - A Primary arterial highway is usually a four-lane divided roadway. A Primary arterial is designed to accommodate a daily capacity ranging from 30,000 to 45,000 with a typical daily capacity of 34,000 (VPD). A Primary arterial's function is similar to that of a Principal or Major arterial. The chief difference is capacity. A Primary Augmented is similar to a Primary arterial, but may include additional lanes, particularly at intersections, resulting in a daily capacity ranging from 35,000 to 50,000 with a typical daily capacity of 40,000 vehicle per day.
- **Secondary Arterial** - A Secondary arterial highway is a four lane roadway (often divided). A Secondary arterial distributes traffic between local streets and Major or Primary arterials. Although some Secondary arterials serve as through routes, most provide more direct access to surrounding land uses than Principal, Major, or Principal arterials. Secondary arterials

carry a daily capacity ranging from 20,000 to 30,000 with a typical daily capacity of 23,000 VPD.

- **Commuter Roadway** - A Commuter roadway is a two-to-four lane unrestricted access roadway with a daily capacity ranging from 7,000 to 11,000 with a typical daily capacity of 10,000 VPD. It differs from a local street in its ability to handle through traffic movements between arterials.

The regional arterials, major arterials, primary arterials, secondary arterials and commuter roadways are the focus of this Chapter. Local streets are not included as they are generally constructed within the footprint of the development and serve that development and then are merely dedicated to the City after completions and inspection. Freeways are also not included as they are the responsibility of CALTRANS.

Demand Upon Infrastructure Created by the Development of Undeveloped Parcels. Undeveloped parcels create few trip-miles beyond an occasional visit to the site for weed abatement purposes, planning purposes or to consider a sale or development of the vacant parcel. None of these trip-ends are on a routine basis. However, a developed parcel will generate a statistically predictable amount of trip-ends and trip-miles, depending upon the specific land use of the development. Thus it can be stated that a vacant parcel, when developed into a specific use, i.e., residential or business, will generate more traffic than it did when it was vacant. Similarly, a change in the use of the property may also increase the number of trip-ends, i.e., the demolition of a low trip-generating insurance office into reconstruction as a new high trip-mile generating fast-food restaurant.

All new development contributes to cumulative traffic impacts, which are difficult to measure and mitigate on a project-by-project, basis but which have significant and widespread cumulative impacts on the City's existing road system. Traffic demands from nearby regional demands account for roughly 50% of the proposed improvement costs. This is consistent with previous travel "pass-through" studies undertaken by the City. The remaining project costs are attributed to local additional demand from new development or have other financing sources (see Appendix A for greater detail).

Factors that will increase the local competition for existing lane miles existing in the City include the following:

- An increase in the City's full-time population through the construction of about 11,366 additional dwelling units contributing approximately 235,845 new trip-miles *daily* or just over 61% of the newly expected daily trip-miles.

- The construction of private business uses currently identified as undeveloped will generate 110,430 new (net) daily trip-miles, just over 29% of the total new trip-miles expected at General Plan build-out. This figure could vary significantly depending upon the type of business uses constructed and possible zoning changes or conditional use permits issued.
- The addition of some 2,221 commercial lodging units (hotel/motel rooms) will increase traffic trip-miles by 39,934 trip-miles, or about 10% of the anticipated new daily trip-miles.

When all (or most) of the available vacant land in the City is developed, the City can expect an additional 386,209 daily trip-miles. For perspective, the City currently experiences approximately 1,881,341 daily trip-miles from the existing residences and businesses. The roughly 386,209 newly anticipated trip-miles represents an over 20% increase over the current 1,881,341 daily trip-miles. While the City is faced with a sizable increase in the number of daily trip-miles at build-out, it should also be noted that there are few remaining opportunities to construct additional lane miles (and controlling signals) to be added to the existing arterial/collector lane-miles to mitigate the 20% expected increase in lane-mile demand. There are currently 332.0 lane miles of major roadways that support the existing 1,881,341 daily trip-miles. To retain full proportionality, the City would need to construct an additional 68.2 lane miles. Unfortunately, there is not the opportunity to construct an additional 68.2 lane miles. The Fair Share Fees program projects (as summarized and attached in Appendix A) would facilitate the construction of an additional roughly 10.4 lane miles. The remaining circulation system projects are a mix of circulation improvements intended to maintain or improve the traffic-carrying capabilities of the existing system. When lane-miles are no longer an option, all capital efforts that can increase the carrying capacity of the existing lane-miles, such as overpasses, cross-walk alternatives must be undertaken. Barring some of the improvements which would be constructed regardless of development, the existing system is generally capable of serving the existing demand on the circulation system.

The Purpose of the Fee. In the City, many of the planned arterials and collectors exist in some form, perhaps not yet fully widened to allow for the full number of lanes. Thus the collection of circulation system impact fees would be used to finish off these existing, but, uncompleted, or not yet maximized roads. The same can be said for overpasses, a number of which are included on the list to be completed to their maximum planned width, again maximizing the carrying capacity. Additionally, the fees would be used to complete the system of signals that insures the smooth movement of vehicles through intersections.

Included are circulation projects needed to alter existing major roadways that currently exist, but due to additional trip-ends are becoming ineffective at moving vehicles. An example would be the final widening of Jamboree Road and Bristol Street (ST-10). This project is required because

additional citizens and business-owners will use the existing streets along with the current users rendering it, again, ineffective at moving traffic at a reasonable pace, primarily during the a.m. and p.m. peak hours of traffic. Additional lane miles would be difficult to plan and construct as aggressive right-of-way acquisition costs would make it financially impractical to widen more of the existing roadways. Thus acceptable traffic pace will have to be attained through a combination of turn lane channelization and signal improvements. Frontage improvements by adjacent development have been included in the calculations as have been costs associated with existing deficiencies in the roadway network.

Again, given the magnitude of growth projected in this Report, numerous intersection improvements and construction of new traffic signals will also be needed to avoid congestion and gridlock in the future. Traffic planners have long known that the critical constraint in a typical roadway network is usually not the roadway itself but the intersections. While the street capacity may be theoretically adequate to carry traffic volumes at build-out, motorists may experience congestion at the intersections of the street. While the City of Newport Beach will certainly undertake a significant number of major street widening projects, an equally important component of traffic system circulation is the alteration of existing signalized intersections to add additional turn and through-lanes at critical intersections in the City. Also critical to improved traffic flow is the use of Intelligent Transportation Systems (ITS) including new traffic signal technology along with updated timing.

The City's total Master Facilities Plan Circulation System improvements section identified twenty-five general circulation system projects covering the City with an estimated cost of \$426,080,797 or a net \$425,485,797 after the existing Circulation System Fair Share Fee Fund balance of \$595,000 is subtracted. Each of the projects will increase some capacity to a circulation system to meet the overall 20% increase in major lane mile local capacity needs. The individual projects and costs are identified on Schedule 3.1 at the end of the Chapter and detailed in Appendix A.

The Use of the Fee. The collection of a Circulation System Fair Share Fee would be used to construct the projects (or portions of projects) identified in Schedule 3.1 at the conclusion of this Chapter's text. The collected fees will be used to create additional lane and bridge miles with which to accommodate the additional 386,209 additional daily trip-miles expected from full General Plan build-out development of the City.

The following table (3-1) identifies some of the key system attributes of the circulation improvements system. The attributes identify that approximately 83% of the total trip miles at General Plan "build-out" are represented by the existing community who have contributed a marginally larger percentage (88%) of the cost of the entire system, also at General Plan "build-out". This would indicate that the City is generally and proportionally "on-target" in terms of the construction of the entire circulation system infrastructure. It is a very short leap away to assume

that the remaining 17% of the traffic trip-mile generators should contribute the financing necessary to construct the remaining 12% lane miles, signalized intersections and bridge improvements.

Table 3-1
Comparison of Transportation System Attributes

Infrastructure Factor	Existing Community	Future Development	Total at Build-out
Number of Trip-miles	1,881,341	386,209	2,267,550
Percentage of Total	83%	17%	100%
Cost of Total System	\$993,181,510	\$136,501,346	\$1,129,683,856 ²
Percentage of Total	88%	12%	100%

The Relationship Between the Need for the Fee and the Type of Development Project. Schedule 3.1 identifies the additional traffic demand to be generated by new development, by type of development. The *Newport Beach Traffic Model, version 3.1 (NBTM)* was the source for the trip-end component utilized in the nexus calculation used to distribute the development-related capital costs. These trip-ends were developed by *Urban Crossroads, Incorporated* in 2003 and are also used to identify needed circulation improvements as part of the recent General Plan update.

As an example, a 200-unit low density detached dwelling unit residential specific plan would generate about 5,420 daily trip-miles³ and a ten-acre commercial-retail development would generate 4,578 daily trip-miles⁴. Each would pay its proportionate share of the total 386,209 newly created the City trip-miles expected at General Plan build-out. In the case of the residential detached dwelling development, the daily trip-miles generated by the 200 new homes represents about 1.4% of the total 386,209 new trip-miles anticipated at build-out, thus they would be required to pay or construct projects on the list to an amount equal to 1.4% of the total development-related project costs. The ten acre commercial development would generate 1.23% of the additional trip-miles and thus would be responsible for 1.23% of the remaining circulation system project costs.

Circulation System Cost Distribution by Average Land Use Trip Frequency and Distance

New Trip Adjustment for Pass-by or Diverted Trips. Appendix C identifies adjustments to new total *trip-ends*. As an example, an acre of general commercial use would be expected, on

average, to generate about 475.89 trip-ends daily⁵. However, approximately 15% of those trip-ends, or about 71.4 trip-ends per day, are *pass-by trip-ends*, that is, the *trip-end* is not truly an *end* but is actually one in a series of stops, i.e. at various commercial establishments, with a different location such as a residence as the final *trip-end* or destination of the series of *trip-ends*. In order to be considered a pass-by trip, the location of the stop must be contiguous to the *generator*⁶ route, i.e. the route that would have been used even if the stop had not been made⁷. The Institute of Transportation Engineers (ITE) indicates that:

Pass-by trips are attracted from passing the site *on an adjacent street* or road-way that offers direct access to the generator. **Pass-by trips are not diverted to/from another roadway.**⁸

Pass-by trip-ends are fully adjusted (reduced at 100%) from the average trip-ends (per day) generated by the fifteen land uses identified in Schedules 3.2 and 3.3 (see also Appendix C).

A *diverted* trip is similar to a *pass-by* trip-end in that it is an extra stop between, as an example, a motorists's work site and his or her residence. The *diverted* trip differs slightly from the *pass-by* trip in that it requires a minor deviation from the normal *generator* route and the temporary stop. In short, a *diverted* trip creates a separate side trip using additional (and different) lane miles from that of the normal route from the motorist's place of employment and his or her home. These trips increase the traffic volume from the generator route, but only for brief distances. The ITE states that diverted trips:

are attracted from traffic volume on roadways within the vicinity of the generator (route) but require a diversion from that roadway to another roadway to gain access to the site. These trips could travel on highways or freeways adjacent to the generator, but without access to the generator. **Diverted linked trips add traffic to streets adjacent to a site, but may not add traffic to the area's major travel routes.**⁹

These *diverted* trips will be adjusted (reduced at 50%) from the full trip count for each of the land uses identified in Chapter 2. The ITE also indicates that "both pass-by and diverted linked trips may be a part of a multiple-stop chain of trips".¹⁰

Again, the schedule identified as Appendix C indicates the total trip-ends and the reduction due to the number pass-by trips (at 100%) and diverted trips (at 50%). The trip pass-by and diversion percentages were generated and are supported by a study conducted by the San Diego Association of Governments (SANDAG) in conjunction with various U.S. and California agencies.¹¹

Additionally, the same SANDAG data schedule referenced above provides information for a trip distance factor component to the nexus. Based upon that data, a trip to an industrial work-site has

the greatest distance at 9.0 miles. A residential trips averages 7.9 miles, a trip from a hotel or motel (once in lodging) averages 7.6 miles and an average trip to a commercial site is the lowest and varies from 2.8 to 3.6 miles. This indicates, as one might conclude from his or her own experiences, that drivers are generally willing, or have to, to travel further distances to employment than they are to shop. Both frequency (trip-ends) and distance (average miles per trip) have been combined into the nexus by multiplying frequency times distance for a total demand factor.

The Relationship Between the Use of the Fee and the Type of Development Paying the Fee. There is very little difference between this and the above category. The fee collected will be based on the projected number of trip-ends the proposed development will generate in relationship to the total 386,209 additional projected trip-miles at build-out. Any amount imposed as a circulation system improvements Fair Share Fee will be placed in a separate fund (collecting interest), and is to be used only on the projects identified on Schedule 3.1 as development-related.

From time to time the City may require an applicant for a private project to construct a street or signal improvement (or portion thereof) that is on the list of required improvements at the end of this Chapter. This method is often undertaken to expedite the project at the request of the applicant/developer. Should the project cost be attributed to development and thus part of the development impact cost calculation, the developer should receive a credit for any monies expended on this required improvement against their circulation improvements impact fee. If one does not already exist, an ordinance addressing the issue of credits should be prepared and added to the Newport Beach Municipal Code.

The Relationship Between the Amount of the Fee and the Cost of the portion of the Facility Attributed to the Development Project. The calculation of the Circulation System Fair Share Fee is based upon the recognition that differing types of developments generate differing amounts of trip-miles. The fee is based upon the projected number of trip-miles generated by the proposed private development projects. The Fair Share Fee Schedule receipts will be accumulated until they reach the amount that could construct a meaningful project to alleviate or mitigate the demands of those new developments. Table 3-2 on the following page (and summarized from Schedule 3.2), identifies the Marginal Needs-based Circulation System Fair Share Fee Schedule for the City, based upon an estimated cost of \$136,501,346 in development-generated required projects or portions thereof. All projects are partially required to accommodate new local development and allocated to the Fair Share Fees. All projects are attributed 50% to new regional development.

Table 3-2
Marginal Needs-based Circulation System Fair Share Fees

Land Use	Recommended Fair Share Fees
Low Density Residential	\$9,578/Unit
Medium Density Residential	\$7,210/Unit
Apartments	\$6,857/Unit
Mobile Homes	\$5,197/Unit
Elderly Residential	\$6,256/Unit
Commercial Lodging	\$6,355/Unit
Restaurants	\$30.455/S.F.
Regional Commercial	\$15.446/S.F.
General Commercial	\$14.862/S.F.
General/Medical Office	\$14.774/S.F.
Industrial Uses	\$7.705/S.F.
Warehouse Uses	\$6.362/S.F.
Hospital Uses	\$11,734/Bed
Commercial Recreational	\$17,677/Acre
No Other Category	\$2,828/Unit

More Detailed Cost Methodology. A more precise calculation of costs for specific types of land uses can be determined by multiplying the average cost per trip-mile of \$353.44 (from Schedule 3.2) by the applicable calculated daily trip-mile rate. The calculation can be found in Schedule 3.2 (and summarized in Table 3-2) at the end of the Chapter and applied to Table 3-3 following. These tables list trip-mile rates and costs for various residential, resort, industrial and commercial developments. A fee system based on a lengthy schedule of trip-mile rates theoretically provides more accuracy and therefore assets in determining specific uses impact on the City's circulation system, but at the same time may increase the City's costs to administer the fee.¹²

**Table 3-3
Marginal Needs-based Fair Share Fees
for Specific Land-uses**

LAND USE	Adjusted Trip-ends	Average Distance	Trip-end to Trip	Additional Trip-miles	Cost per Trip-mile	Cost per 1,000 Square Feet or Dwelling Unit
RESIDENTIAL LAND USES (per Unit):						
Residential Low (SFR)	6.86	7.9	0.5	27.10	\$353.44	\$9,578.22 /Unit
Residential Medium (SFR)	5.16	7.9	0.5	20.4	\$353.44	\$7,210.18 /Unit
Apartment	4.91	7.9	0.5	19.4	\$353.44	\$6,856.74 /Unit
Mobile Home Dwelling	4.63	7.9	0.5	18.3	\$353.44	\$6,467.95 /Unit
Elderly Residential	4.48	7.9	0.5	17.7	\$353.44	\$6,255.89 /Unit
RESORT/TOURIST (per Unit or Entry Door):						
Hotel	6.29	7.6	0.5	23.9	\$353.44	\$8,447.22 /Room
Motel	4.34	7.6	0.5	16.5	\$353.44	\$5,831.76 /Room
INDUSTRIAL (per 1,000 SF):						
Heavy Industrial	5.97	9.0	0.5	26.9	\$353.44	\$9,507.54 /KSF
Warehousing	4.39	9.0	0.5	19.8	\$353.44	\$6,998.11 /KSF
Storage Facility	2.21	9.0	0.5	9.9	\$353.44	\$3,499.06 /KSF
COMMERCIAL (per 1,000 SF):						
Movie Theater	2.47	4.3	0.5	5.3	\$353.44	\$1,873.23 /KSF
Church	5.92	4.3	0.5	12.7	\$353.44	\$4,488.69 /KSF
Medical-Dental Office	22.21	8.8	0.5	97.7	\$353.44	\$34,531.09 /KSF
General Office Building	7.16	8.8	0.5	31.5	\$353.44	\$11,133.36 /KSF
Shopping Center	30.20	4.3	0.5	64.9	\$353.44	\$22,938.26 /KSF
Hospital	11.42	4.3	0.5	24.6	\$353.44	\$8,694.62 /KSF
High-Turnover Restaurant	8.90	4.3	0.5	19.1	\$353.44	\$6,750.70 /KSF
Convenience Market	43.57	4.3	0.5	93.7	\$353.44	\$33,117.33 /KSF
Other: (not available "per KSF")						
Service Station & Market	105.81	4.3	0.5	227.5	\$353.44	\$80,407.60 /FP/Day (4)

NOTES:

1. ADT = Average Daily Trips

2. KSF = Thousand Square Feet of Gross Floor Area

3. Adjusted for Pass-by and Diverted Trips.

4. FP/Day = per "Fueling Position" per day.

This set of proposed fees would generate a reasonable portion of the amount of capital revenue necessary to construct the needed circulation construction projects based upon a City-wide application. These figures will be compared to the financial commitment or asset distribution demonstrated by the existing community.

The City has a significant inventory of circulation system infrastructure assets that have been acquired or constructed over the life of the City. The assets acquired to date represent the City's attempt to generate the required circulation capacity in a proportional fashion. That is to say, if

roughly 75% of the traffic demand (in daily trip-miles) is represented by the existing community, then at least 75% of the General Plan circulation system should have been completed also. The City circulation system infrastructure assets consist of (and are not limited to):

- The City has 332.0 lane miles (within 61.4 linear miles of 2, 4, 7 or 8 lane roadways) of major roadways with a replacement value of approximately \$365,330,760, or just under \$1.1 million per lane mile.
- Seven bridges providing an approximate 1.1 lane miles of major roadway. The bridges, at approximately \$350 per square foot for construction costs, have a combined replacement value of approximately \$39,705,750.
- Sixty-one traffic signals (with signalized intersection improvements) that control traffic on major roadways (as defined earlier in this Chapter). The sixty-one traffic signals and signalized intersections have a replacement value of approximately \$45,750,000.
- The same 332.0 lane miles of major roadway have required the acquisition of 36,120,000 square feet of right-of-way. At an extremely low ROW cost estimate of \$15.00 per square foot (or \$653,400/acre), the existing right-of way would cost the City some \$541,800,000. This is the most expensive circulation system asset that the City (and its residents) owns.
- The City has \$595,000 in existing Fund Balance in the current Circulation System Fair Share Fee Fund.

Combined, the five differing types of circulation system assets total just under \$993,181,510 at current replacement or acquisition costs. This represents the financial commitment of the existing community. When this total cost of the existing circulation system is distributed over the entire community, it gives us an average cost per new trip-mile. Table 3-4 following, distributes the net \$993,181,150 over the existing community, using the identical nexus factor (e.g. trip-miles) used for distribution of future costs, the existing community has contributed the following, on average, by land use:

[This space left vacant to place the following table on a single page].

Table 3-4
Existing Community Financial Commitment
or Local Circulation System or Assets-based Proportionality Test

Land Use	Existing Financial Commitment
Low Density Residential	\$14,306/Unit
Medium Density Residential	\$10,769/Unit
Apartments	\$10,241/Unit
Mobile Homes	\$7,760/Unit
Elderly Residential	\$9,344/Unit
Commercial Lodging	\$9,492/Unit
Restaurants	\$45.489/S.F.
Regional Commercial	\$23.070/S.F.
General Commercial	\$22.199/S.F.
General/Medical Office	\$22.067/S.F.
Industrial Uses	\$11.509/S.F.
Warehouse Uses	\$9.713/S.F.
Hospital Uses	\$17,527/Bed
Commercial Recreational	\$24,890/Acre
No Other Category	\$4,313/Unit

It should be noted that the existing community has contributed, on average, a greater amount, at about 55% more, than would be required of future development to meet all of the basic needs for build-out and all users.

Tables 3-2 (Basic Needs-based Fair Share Fee) and 3-4 (Current Financial Commitment or Assets-based Proportionality Test Fair Share Fees) identify the amount of the pre-building. A detached

dwelling, has contributed, on average about \$14,306 (Table 3-4) towards the construction of the circulation (street, signals and bridges) system, while with adoption of the Basic Needs-based Fair Share Fees a detached dwelling unit would be asked to contribute \$9,578 towards finishing the system, or about two-thirds of the existing contribution of a similar existing detached dwelling unit.

Front-ended System. The resulting costs identified in Tables 3-2 and 3-4 indicate that there is the likelihood of excess capacity in the existing circulation system for which new development will accrue benefit from, or at least there will be a disproportionate contribution between existing and future users of the City's circulation system.

Recommended Circulation (streets, signals and bridges) System Fair Share Fee. The adoption of the Fair Share Fees identified in the Marginal Needs-based costs identified in Table 3-2 (and detailed in Schedule 3.2 at the end of the chapter), is recommended as the Fair Share Fee schedule for the Circulation (streets, signals and bridges) System capital needs and would generate enough capital to construct the facilities needed to accommodate the new development. The impact fees contained within Schedule 3.2 are lower than the existing community's financial commitment asset amounts as calculated in Schedule 3.3, thus not violating any proportionality requirements.

[This space left blank to place the Chapter endnotes on a single page].

Chapter Endnotes

1. The City's Circulation element consists of similar definitions and roadway cross-sections. For examples of each, see 7-4 and 7-5 of the *City of Newport Beach General Plan Circulation Element*.
2. The total consists of the \$993,181,510 existing Circulation System and the net \$136,501,346 in development-related costs. Not included in the total is the \$75,944,053 in other identified revenue sources and the \$213,040,399 unfunded portion necessary to finance the remaining portion of the Circulation System Master Plan (per Appendix A).
3. Based upon 27.1 trip-miles per each of the 200 detached dwelling units (200 units X 27.1 trip-miles = 5,420 daily trip-miles).
4. Based upon ten acres with a 0.25 Floor Area Ratio at (10 acres X 43,560 square feet/acre X 0.25 FAR X 43.7 daily-trip miles per 1,000 S.F.).
5. Based upon the 25% FAR anticipated in the future and 10,890 square feet per acre times 43.7 trip-ends.
6. The normal route between a daily work-site and the residence of the motorist.
7. As an example, a motorist travels the same route from work to home daily. On some number of occasions, the motorist stops at a market along the route to pick up some groceries. These stops at the market would be considered pass-by trip-ends in that they do not generate any additional miles along that route.
8. *Trip Generation Handbook*, Second Edition, Institute of Traffic Engineers, 1099 14th Street, NW., Suite 300, Washington D.C. 20005-3438, Chapter 5, Section 5.1, *Pass-by, Primary and Diverted Linked Trips*.
9. *Ibid*, page 29
10. *Ibid*, page 29
11. *Traffic Generators*, San Diego Association of Governments, 401 B Street, Suite 800, San Diego, CA 92101, [Brief Guide to Traffic Generation Rates](#) compiled in conjunction with the U.S. Department of Housing and Urban Development, U.S. Department of Transportation, the California Department of Transportation and the U.S. Environmental Protection Agency. April, 2002.
12. A more extensive listing of traffic generator by land use is available in *Trip Generation* as published by the Institute of Transportation Engineers, Washington D.C.

Schedule 3.1

City of Newport Beach
 2009-10 Fair Share (development impact) Fee Calculation and Nexus Report
 Allocation of Project Cost Estimates
 Circulation (Streets, Signals and Bridges) System

Line #	Description	Estimated Cost	Construction Needs to Accommodate Regional Growth Demands		Construction Needs That Increases Circulation System Capacity		Construction Needs to be Financed by Other Sources	
			Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost	Percent Need	Apportioned Dollar Cost
ST-01	Bluff Road and Coast Highway (1a)	\$5,781,000	50.00%	\$2,890,500	50.00%	\$2,890,500	0.00%	\$0
ST-02	15th and Coast Highway (1b)	\$5,781,000	50.00%	\$2,890,500	50.00%	\$2,890,500	0.00%	\$0
ST-03	15th Street Extension (1L)	\$56,047,500	50.00%	\$28,023,750	25.00%	\$14,011,875	25.00%	\$14,011,875
ST-04	Newport Boulevard and 32nd Street (D & E)	\$1,245,500	50.00%	\$622,750	50.00%	\$622,750	0.00%	\$0
ST-05	Riverside Avenue & Coast Highway (7)	\$3,359,000	50.00%	\$1,679,500	50.00%	\$1,679,500	0.00%	\$0
ST-06	Bluff Road between 17th Street and 19th Street	\$54,763,914	50.00%	\$27,381,957	25.00%	\$13,690,979	25.00%	\$13,690,979
ST-07	MacArthur Blvd. & Campus Ave. (9)	\$2,121,000	50.00%	\$1,060,500	25.00%	\$530,250	25.00%	\$530,250
ST-08	Jamboree Road & Campus Drive (13)	\$2,997,000	50.00%	\$1,498,500	25.00%	\$749,250	25.00%	\$749,250
ST-09	Campus Drive & Bristol Street - North (15)	\$16,585,000	50.00%	\$8,292,500	26.00%	\$4,312,100	24.00%	\$3,980,400
ST-10	Jamboree Road & Bristol Street - South (32)	\$4,911,166	50.00%	\$2,455,583	50.00%	\$2,455,583	0.00%	\$0
ST-11	MacArthur Road & Ford Road/Bonita Canyon (49)	\$2,673,000	50.00%	\$1,336,500	50.00%	\$1,336,500	0.00%	\$0
ST-12	MacArthur Road & San Joaquin Hills Road (50)	\$4,767,000	50.00%	\$2,383,500	36.00%	\$1,716,120	14.00%	\$667,380
ST-13	Coast Highway, Dover to Newport Blvd. (A)	\$21,534,000	50.00%	\$10,767,000	50.00%	\$10,767,000	0.00%	\$0
ST-14	Irvine Avenue & University Drive (B & 20)	\$8,709,000	50.00%	\$4,354,500	25.00%	\$2,177,250	25.00%	\$2,177,250
ST-15	Coast Highway and Bayside (C)	\$4,462,000	50.00%	\$2,231,000	50.00%	\$2,231,000	0.00%	\$0
ST-16	Placentia Avene, between Hospital & Superior (F)	\$4,790,000	50.00%	\$2,395,000	50.00%	\$2,395,000	0.00%	\$0
ST-17	15th Street between Placentia to Monrovia (G)	\$5,880,000	50.00%	\$2,940,000	25.00%	\$1,470,000	25.00%	\$1,470,000
ST-18	MacArthur, Southerly of San Miguel to Coast Highway (H)	\$2,672,000	50.00%	\$1,336,000	50.00%	\$1,336,000	0.00%	\$0
ST-19	17th Street from Westerly Terminus to Bluff Road (J)	\$6,754,500	50.00%	\$3,377,250	25.00%	\$1,688,625	25.00%	\$1,688,625
ST-20	Bluff Road between 17th Street to Coast Highway (K)	\$66,380,500	50.00%	\$33,190,250	25.00%	\$16,595,125	25.00%	\$16,595,125
ST-21	19th Street to Brookhurst (N)	\$55,586,717	50.00%	\$27,793,359	25.00%	\$13,896,679	25.00%	\$13,896,679
ST-22	Arches Interchange Improvements	\$13,660,000	50.00%	\$6,830,000	50.00%	\$6,830,000	0.00%	\$0
ST-23	Intelligent Transportation System	\$8,568,000	50.00%	\$4,284,000	50.00%	\$4,284,000	0.00%	\$0
ST-24	Pedestrian Improvements	\$12,000,000	50.00%	\$6,000,000	50.00%	\$6,000,000	0.00%	\$0
ST-25	Grade Separation at Jamboree/MacArthur	\$54,052,000	50.00%	\$27,026,000	38.00%	\$20,539,760	12.00%	\$6,486,240
SUB-TOTAL ESTIMATED NEW PROJECT COSTS		\$426,080,797	50.00%	\$213,040,399	32.18%	\$137,096,346	17.82%	\$75,944,053
LESS: Existing Circulation System DIF Fund Balance		(\$595,000)	0.00%	\$0	100.00%	(\$595,000)	0.00%	\$0
SUB-TOTAL ADJUSTMENTS		(\$595,000)	0.00%	\$0	100.00%	(\$595,000)	0.00%	\$0
Total - Circulation System-related Capital Project Needs		\$425,485,797	50.07%	\$213,040,399	32.08%	\$136,501,346	17.85%	\$75,944,053
					Forward to Schedule 3.2			

Schedule 3.2

City of Newport Beach
 2009-10 Fair Share (development impact) Fee Calculation and Nexus Report
 Marginal Needs-based Impact Costs (Fees)
 Circulation (Streets, Signals and Bridges) System

<i>Proposed Land Use</i>	<i>Undeveloped Units</i>	<i>Trip-mile Generation Rate</i>	<i>Additional Daily Trip-miles</i>	<i>Percentage of Additional Trip-miles</i>	<i>Allocation of Expansion Costs</i>	<i>Development Impact Fee per Unit or Square Foot</i>
Low Density Dwellings	1,321	27.10	35,799	9.27%	\$12,652,764	\$9,578 per Unit
Medium Density Dwellings	4,696	20.40	95,798	24.80%	\$33,858,755	\$7,210 per Unit
Apartment Dwellings	5,374	19.40	104,256	26.99%	\$36,848,142	\$6,857 per Unit
Mobile Home Dwellings	(145)	14.70	(2,132)	-0.55%	(\$753,532)	\$5,197 per Unit
Elderly Residential Dwellings	120	17.70	2,124	0.55%	\$750,704	\$6,256 per Unit
Commercial Lodging Units	2,221	17.98	39,934	10.34%	\$14,114,235	\$6,355 per Unit
Restaurant S.F.	57,760	86.17	4,977	1.29%	\$1,759,066	\$30.455 per S.F
Regional Commercial S.F.	288,525	43.70	12,609	3.26%	\$4,456,514	\$15.446 per S.F
General Commercial S.F.	1,600,397	42.05	67,297	17.43%	\$23,785,388	\$14.862 per S.F
General/Medical Office S.F.	385,720	41.80	16,123	4.17%	\$5,698,498	\$14.774 per S.F
Industrial S.F.	(143,630)	21.80	(3,131)	-0.81%	(\$1,106,618)	\$7.705 per S.F
Warehouse S.F.	1,000	18.40	18	0.00%	\$6,362	\$6.362 per S.F
Hospital Uses (beds)	377	33.20	12,516	3.24%	\$4,423,643	\$11,734 per Bed
Comm. Recreational (acres)	0	47.15	5	0.00%	\$1,768	\$17,677 per Acre
No Other Category (units)	2	8.17	16	0.00%	\$5,655	\$2,828 per Unit
TOTAL	--		386,209	100.00%	\$136,501,346	in Total Circulation Capital Needs
More Detailed Community Equity-based "Trip-mile" Cost Alternat			386,209		\$136,501,346	\$353.44 per Daily Trip-mile

Schedule 3.3

City of Newport Beach
 2009-10 Fair Share (development impact) Fee Calculation and Nexus Report
 Community Financial Commitment or Equity-based Proportionality Test Fees
 Circulation (Streets, Signals and Bridges) System

<i>Proposed Land Use</i>	<i>Developed Units</i>	<i>Trip-mile Generation Rate</i>	<i>Existing Daily Trip-miles</i>	<i>Percentage of Existing Trip-miles</i>	<i>Allocation of Infrastructure "Assets"</i>	<i>Current Financial Commitment per Unit or Square Foot</i>
Low Density Dwellings	18,702	27.10	506,824	26.94%	\$267,558,212	\$14,306 per Unit
Medium Density Dwellings	10,974	20.40	223,870	11.90%	\$118,183,544	\$10,769 per Unit
Apartment Dwellings	9,703	19.40	188,238	10.01%	\$99,373,004	\$10,241 per Unit
Mobile Home Dwellings	600	14.70	8,820	0.47%	\$4,656,184	\$7,760 per Unit
Elderly Residential Dwellings	200	17.70	3,540	0.19%	\$1,868,810	\$9,344 per Unit
Commercial Lodging Units	3,365	17.98	60,503	3.22%	\$31,940,231	\$9,492 per Unit
Restaurant S.F.	115,090	86.17	9,917	0.53%	\$5,235,298	\$45.489 per S.F
Regional Commercial S.F.	1,331,000	43.70	58,165	3.09%	\$30,705,974	\$23.070 per S.F
General Commercial S.F.	4,098,787	42.05	172,354	9.16%	\$90,987,652	\$22.199 per S.F
General/Medical Office S.F.	13,129,386	41.80	548,808	29.17%	\$289,722,041	\$22.067 per S.F
Industrial S.F.	1,291,079	21.80	28,146	1.50%	\$14,858,601	\$11.509 per S.F
Warehouse S.F.	196,420	18.40	3,614	0.19%	\$1,907,872	\$9.713 per S.F
Hospital Uses (beds)	1,692	33.20	56,174	2.99%	\$29,654,900	\$17,527 per Bed
Comm. Recreational (acres)	69	47.15	3,258	0.17%	\$1,719,932	\$24,890 per Acre
No Other Category (units)	1,115	8.17	9,110	0.48%	\$4,809,273	\$4,313 per Unit
TOTAL	--	--	1,881,341	100.00%	\$993,181,510	
Master Plan Major Street Assets					\$365,330,760	
Master Plan Major Bridge Assets					\$39,705,750	
Master Plan Traffic Signal Assets					\$45,750,000	
Master Plan Right-of-Way Assets					\$541,800,000	
Existing Circulation System Impact Fee Fund Balance					\$595,000	
More Detailed Marginal Needs-based "Trip-mile" Cost Alternative			1,881,341		\$993,181,510	\$527.91 per Daily Trip-mile

Appendix A
Master Facilities Plan

City of Newport Beach Master Facilities Plan Circulation (streets, signals and bridges) System		2010-11	2011-12	2012-13	2013-14	2014-15 Through Build-out	Project Build-out Total
ST-01	Bluff Road and Coast Highway (1a)	\$0	\$0	\$0	\$0	\$5,781,000	\$5,781,000
ST-02	15th and Coast Highway (1b)	\$0	\$0	\$0	\$0	\$5,781,000	\$5,781,000
ST-03	15th Street Extension (1L)	\$0	\$0	\$0	\$0	\$56,047,500	\$56,047,500
ST-04	Newport Boulevard and 32nd Street (D & E)	\$0	\$0	\$0	\$0	\$1,245,500	\$1,245,500
ST-05	Riverside Avenue & Coast Highway (7)	\$0	\$0	\$0	\$0	\$3,359,000	\$3,359,000
ST-06	Bluff Road between 17th Street and 19th Street	\$0	\$0	\$0	\$0	\$54,763,914	\$54,763,914
ST-07	MacArthur Blvd. & Campus Ave. (9)	\$0	\$0	\$0	\$0	\$2,121,000	\$2,121,000
ST-08	Jamboree Road & Campus Drive (13)	\$0	\$0	\$0	\$0	\$2,997,000	\$2,997,000
ST-09	Campus Drive & Bristol Street - North (15)	\$0	\$0	\$0	\$0	\$16,585,000	\$16,585,000
ST-10	Jamboree Road & Bristol Street - South (32)	\$0	\$0	\$0	\$0	\$4,911,166	\$4,911,166
ST-11	MacArthur Road & Ford Road/Bonita Canyon (49)	\$0	\$0	\$0	\$0	\$2,673,000	\$2,673,000
ST-12	MacArthur Road & San Joaquin Hills Road (50)	\$0	\$0	\$0	\$0	\$4,767,000	\$4,767,000
ST-13	Coast Highway, Dover to Newport Blvd. (A)	\$0	\$0	\$0	\$0	\$21,534,000	\$21,534,000
ST-14	Irvine Avenue & University Drive (B & 20)	\$0	\$0	\$0	\$0	\$8,709,000	\$8,709,000
ST-15	Coast Highway and Bayside (C)	\$0	\$0	\$0	\$0	\$4,462,000	\$4,462,000
ST-16	Placentia Avenue, between Hospital & Superior (F)	\$0	\$0	\$0	\$0	\$4,790,000	\$4,790,000
ST-17	15th Street between Placentia to Monrovia (G)	\$0	\$0	\$0	\$0	\$5,880,000	\$5,880,000
ST-18	MacArthur, Southerly of San Miguel to Coast Highway (H)	\$0	\$0	\$0	\$0	\$2,672,000	\$2,672,000
ST-19	17th Street from Westerly Terminus to Bluff Road (J)	\$0	\$0	\$0	\$0	\$6,754,500	\$6,754,500
ST-20	Bluff Road between 17th Street to Coast Highway (K)	\$0	\$0	\$0	\$0	\$66,380,500	\$66,380,500
ST-21	19th Street to Brookhurst (N)	\$0	\$0	\$0	\$0	\$55,586,717	\$55,586,717
ST-22	Arches Interchange Improvements	\$0	\$0	\$0	\$0	\$13,660,000	\$13,660,000
ST-23	Intelligent Transportation System	\$0	\$0	\$0	\$0	\$8,568,000	\$8,568,000
ST-24	Pedestrian Improvements	\$0	\$0	\$0	\$0	\$12,000,000	\$12,000,000
ST-25	Grade Separation at Jamboree/MacArthur	\$0	\$0	\$0	\$0	\$54,052,000	\$54,052,000
Totals		\$0	\$0	\$0	\$0	\$426,080,797	\$426,080,797

Notes:

1. Project timing is not a component of this project. As a result, all projects default to the "Build-out" column.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: Bluff Road and Coast Highway (1a)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works – Engineering	Project No.: ST-01

Project Description:

The proposed improvements consist of the addition of a second southbound right-turn lane and a second eastbound left-turn lane. The improvement is beyond that required with the initial construction of Bluff Road and is needed to accommodate projected increases in traffic volumes from General Plan development. The project increases circulation system capacity. One-half of the improvement cost is included in (and accommodates) City-wide development with the remainder benefitting regional growth. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This intersection improvement is required to accommodate regional and General Plan development at the City's adopted level of service. The City can expect a 20% increase in the number of daily trip-miles from the current 1,881,341 daily trip-miles to roughly 2,267,550 daily trip-miles, an increase of 386,209 daily trip miles. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets. This improvement is in addition to the standard intersection improvements that would otherwise occur in Project ST-20.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$513,000	\$513,000
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$2,016,000	\$2,016,000
<i>Construction</i>	\$0	\$0	\$0	\$0	\$1,713,000	\$1,713,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$1,539,000	\$1,539,000
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$5,781,000	\$5,781,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: 15th and Coast Highway (1b)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works – Engineering	Project No.: ST-02

Project Description:

The proposed improvements consist of the addition of a second southbound right-turn lane and a second eastbound left-turn lane. The improvement is beyond that required with the initial construction of 15th Street and is needed to accommodate projected increases in traffic volumes from General Plan development. The project increases circulation system capacity. One-half of the improvement cost is included in (and accommodates) City-wide development with the remainder benefitting regional growth. The improvements are the same as those at the adjacent intersection covered by Project ST-01 so the same cost figures have been used. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This intersection improvement is required to accommodate regional and General Plan development at the City's adopted level of service. The City can expect a 20% increase in the number of daily trip-miles from the current 1,881,341 daily trip-miles to roughly 2,267,550 daily trip-miles, an increase of 386,209 daily trip miles. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets. This improvement is in addition to the standard intersection improvements that would otherwise occur in Project ST-03.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$513,000	\$513,000
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$2,016,000	\$2,016,000
<i>Construction</i>	\$0	\$0	\$0	\$0	\$1,713,000	\$1,713,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$1,539,000	\$1,539,000
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$5,781,000	\$5,781,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: 15th Street Extension (1L)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works – Engineering	Project No.: ST-03

Project Description:

The project consists of the extension of 15th Street westerly from its current terminus at Monrovia Avenue to Pacific Coast Highway. Roughly 25% of the project benefits adjacent development and will most likely be required as a condition of development approval. Another 25% benefits City-wide development with the remaining 50% benefitting regional growth. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This intersection improvement is required to accommodate regional and General Plan development at the City's adopted level of service. This intersection improvement is required to accommodate General Plan development at the City's adopted level of service. The City can expect a 20% increase in the number of daily trip-miles from the current 1,881,341 daily trip-miles to roughly 2,267,550 daily trip-miles, an increase of 386,209 daily trip miles. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets.

Consequences of Not Completing Project:

Failure to construct this portion of the MPSH will result in the need for widening Coast Highway as well as improvements at the intersection of Coast Highway at Balboa Boulevard/Superior Avenue.

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$6,757,750	\$6,757,750
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$20,128,500	\$20,128,500
<i>Construction</i>	\$0	\$0	\$0	\$0	\$8,888,000	\$8,888,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$20,273,250	\$20,273,250
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$56,047,500	\$56,047,500

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> Newport Boulevard and 32nd Street (D & E)	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works - Engineering	<i>Project No.:</i> ST-04

Project Description:

The proposed improvements consist of the addition of a southbound right-turn lane and a third northbound through lane. The project increases circulation system capacity and assists in accommodating new development. One-half of the improvement cost is included in (and accommodates) City-wide development with the remainder benefitting regional growth. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This segment of arterial roadway is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program - Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$141,750	\$141,750
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$14,500	\$14,500
<i>Construction</i>	\$0	\$0	\$0	\$0	\$664,000	\$664,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$425,250	\$425,250
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$1,245,500	\$1,245,500

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: Riverside Avenue & Coast Highway (7)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works - Engineering	Project No.: ST-05

Project Description:

The proposed improvements consist of the construction of a second eastbound left-turn lane, a third eastbound through lane and the conversion of the westbound right-turn lane into a through lane. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development throughout the City. This intersection operates at a deficient level of service currently during afternoon peak hour traffic. This deficiency is reduced in the future due to land use changes. The morning peak hour traffic is currently acceptable but becomes deficient in the future; therefore the improvement costs are not reduced due to the existing deficiency. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This intersection improvement is required to accommodate General Plan development at the City's adopted level of service. The City can expect a 20% increase in the number of daily trip-miles from the current 1,881,341 daily trip-miles to roughly 2,267,550 daily trip-miles, an increase of 386,209 daily trip miles. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program - Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$298,250	\$298,250
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$718,000	\$718,000
<i>Construction</i>	\$0	\$0	\$0	\$0	\$1,448,000	\$1,448,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$894,750	\$894,750
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$3,359,000	\$3,359,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> Bluff Road between 17th Street and 19th Street	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works - Engineering	<i>Project No.:</i> ST-06

Project Description:

This project consists of the construction of Bluff Road to the standards of a four lane Secondary Arterial roadway. Costs for this segment were derived by using the ratio of length of this segment to the length of the segment of Bluff Road as described in Project ST-20 and applying that ratio to the cost for Project ST-20. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity. Roughly 25% of the project benefits adjacent development and will most likely be required as a condition of development approval. Another 25% benefits City-wide development with the remaining 50% benefitting regional growth. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This segment of arterial roadway is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program - Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$6,657,338	\$6,657,338
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$20,278,913	\$20,278,913
<i>Construction</i>	\$0	\$0	\$0	\$0	\$7,855,650	\$7,855,650
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$19,972,013	\$19,972,013
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$54,763,914	\$54,763,914

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> MacArthur Blvd. & Campus Ave. (9)	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works – Engineering	<i>Project No.:</i> ST-07

Project Description:

The project consists of adding a third northbound left-turn lane and converts a southbound through lane to a right-turn/through lane. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity. Roughly one-half of the project cost will benefit regional growth with the remaining costs split equally with the City of Irvine as a portion of the intersection is in that City. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This intersection improvement is required to accommodate regional and General Plan development at the City's adopted level of service. The City can expect a 20% increase in the number of daily trip-miles from the current 1,881,341 daily trip-miles to roughly 2,267,550 daily trip-miles, an increase of 386,209 daily trip miles. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$188,500	\$188,500
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$420,000	\$420,000
<i>Construction</i>	\$0	\$0	\$0	\$0	\$947,000	\$947,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$565,500	\$565,500
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$2,121,000	\$2,121,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> Jamboree Road & Campus Drive (13)	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works – Engineering	<i>Project No.:</i> ST-08

Project Description:

The improvement consists of eliminating the eastbound free right-turn lane, adding a fourth southbound through lane and adding a northbound right-turn lane. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity. Roughly one-half of the project cost will benefit regional growth with the remaining costs split equally with the City of Irvine as a portion of the intersection is in that City. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This intersection improvement is required to accommodate regional and General Plan development at the City's adopted level of service. The City can expect a 20% increase in the number of daily trip-miles from the current 1,881,341 daily trip-miles to roughly 2,267,550 daily trip-miles, an increase of 386,209 daily trip miles. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$266,250	\$266,250
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$641,000	\$641,000
<i>Construction</i>	\$0	\$0	\$0	\$0	\$1,291,000	\$1,291,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$798,750	\$798,750
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$2,997,000	\$2,997,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> Campus Drive & Bristol Street - North (15)	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works - Engineering	<i>Project No.:</i> ST-09

Project Description:

The improvements consist of adding a fourth northbound through lane, adding a third southbound right-turn lane and a fifth westbound through lane. The widening of the Campus Drive bridge over SR-73 is included. The project increases circulation system capacity. Roughly 26% of the improvement cost is included in (and accommodates) City-wide development with 50% of the costs associated with the regional growth including a portion to be financed by the County's JWA as a mitigation contribution resulting from that facility's expansion. The remaining 24% of the cost is attributed existing deficiencies. This intersection is currently operating at a deficient Level of Service during the afternoon peak with an ICU of 0.94. It is expected to operate with an ICU of 1.07 upon implementation of the General Plan. The improvement cost is assigned to the Fair Share Fee has been reduced by 24% to account for the existing deficiency.

Justification/Requirement for Project:

This intersection is shared with the County of Orange. This mitigation program for John Wayne Airport (JWA) includes one of the four needed improvements. The City funded improvements are more expensive per square foot as they include widening the bridge over SR-73. The share of improvement cost assigned to the Fair Share Fee is reduced by 15% because of the JWA improvement. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets. The project is consistent with the City's Master Plan of Streets and Highways (MPSH). A portion of these improvements are necessary to accommodate additional traffic volumes resulting from general Plan development.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program - Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$1,471,250	\$1,471,250
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$1,076,000	\$1,076,000
<i>Construction</i>	\$0	\$0	\$0	\$0	\$9,624,000	\$9,624,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$4,413,750	\$4,413,750
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$16,585,000	\$16,585,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: Jamboree Road & Bristol Street – South (32)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works – Engineering	Project No.: ST-10

Project Description:

The improvements include the addition of a sixth northbound lane and a fourth southbound lane on Jamboree Road bridge over SR-73. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development throughout the City. The project increases circulation system capacity and accommodates development throughout the City. Half of the project costs will benefit regional development. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This intersection improvement is required to accommodate regional and General Plan development at the City's adopted level of service. The City can expect a 20% increase in the number of daily trip-miles from the current 1,881,341 daily trip-miles to roughly 2,267,550 daily trip-miles, an increase of 386,209 daily trip miles. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$111,618	\$111,618
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$0	\$0
<i>Construction</i>	\$0	\$0	\$0	\$0	\$4,464,695	\$4,464,695
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$334,853	\$334,853
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$4,911,166	\$4,911,166

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: MacArthur Road & Ford Road/Bonita Canyon (49)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works - Engineering	Project No.: ST-11

Project Description:

The project improvements consist of the construction of a third southbound left-turn lane. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity and accommodates development throughout the City. Half of the project costs will benefit regional development. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This intersection improvement is required to accommodate regional and General Plan development at the City's adopted level of service. The City can expect a 20% increase in the number of daily trip-miles from the current 1,881,341 daily trip-miles to roughly 2,267,550 daily trip-miles, an increase of 386,209 daily trip miles. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program - Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$237,500	\$237,500
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$504,000	\$504,000
<i>Construction</i>	\$0	\$0	\$0	\$0	\$1,219,000	\$1,219,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$712,500	\$712,500
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$2,673,000	\$2,673,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: MacArthur Road & San Joaquin Hills Road (50)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works – Engineering	Project No.: ST-12

Project Description:

The improvements include an additional third southbound left-turn lane, an additional third eastbound left-turn lane and the conversion of the northbound free-right-turn into a shared through/right lane. Roughly 36% of the costs of the improvements are required to accommodate the additional projected volumes resulting from General Plan development throughout the City. One half of the cost of the improvements is included (and accommodates regional growth with the remainder specifically benefitting adjacent development (Newport Center). This intersection is currently operating at a deficient Level of Service during the afternoon peak with an ICU of 0.93. It is expected to operate with an ICU of 1.11 upon implementation of the General Plan. The improvement cost assigned to the Fair Share fee has been reduced by 14% to account for the existing deficiency.

Justification/Requirement for Project:

The Irvine Company (TIC) has been conditioned to complete a portion of the required improvements as mitigation for new development. TIC's improvement cost represents approximately one-fourth of the total improvements needed. The share of the improvement cost assigned to the Fair Share Fee is reduced by 25% accordingly. There are limits as to how many additional lanes that can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets. The project is consistent with the City's Master Plan of Streets and Highways (MPSH). This project increases traffic volume capacity and thus a portion of these project improvements are required to accommodate the additional projected volumes resulting from General Plan development through-out the City.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$423,250	\$423,250
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$1,285,000	\$1,285,000
<i>Construction</i>	\$0	\$0	\$0	\$0	\$1,789,000	\$1,789,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$1,269,750	\$1,269,750
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$4,767,000	\$4,767,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: Coast Highway, Dover to Newport Blvd. (A)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works - Engineering	Project No.: ST-13

Project Description:

The project improvements consists of the widening of Coast Highway to three lanes in each direction. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity and accommodates general new development. Even though the street segment is a State highway, no assistance from the State is anticipated. Half of the project costs will benefit regional development. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This segment of arterial roadway is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program - Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
Design/Engineering/Admin.	\$0	\$0	\$0	\$0	\$1,910,750	\$1,910,750
Land Acquisition/Right of Way	\$0	\$0	\$0	\$0	\$8,312,000	\$8,312,000
Construction	\$0	\$0	\$0	\$0	\$5,579,000	\$5,579,000
Contingency	\$0	\$0	\$0	\$0	\$5,732,250	\$5,732,250
Equipment/Other	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$21,534,000	\$21,534,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: Irvine Avenue & University Drive (B & 20)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works – Engineering	Project No.: ST-14

Project Description:

The project includes the widening of Irvine Avenue to three through lanes in each direction and the addition of a left/through lane for eastbound traffic. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project is consistent with the City's Master Plan of Streets and Highways (MPSH). Roughly one half of the project is attributable to regional growth with the remaining 50% evenly split with the County of Orange as the intersection is partially within their jurisdiction.

Justification/Requirement for Project:

This combined segment of arterial roadway and intersection improvement is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$772,750	\$772,750
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$2,297,300	\$2,297,300
<i>Construction</i>	\$0	\$0	\$0	\$0	\$3,320,700	\$3,320,700
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$2,318,250	\$2,318,250
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$8,709,000	\$8,709,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> Coast Highway and Bayside (C)	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works – Engineering	<i>Project No.:</i> ST-15

Project Description:

The improvements consist of a fourth eastbound through lane from west of Bayside Drive to the point east of the intersection where the fourth lane begins. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity and accommodates general new development. Even though the street segment is a State highway, no assistance from the State is anticipated. Half of the project costs will benefit regional development. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This segment of arterial roadway is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$396,000	\$396,000
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$1,234,000	\$1,234,000
<i>Construction</i>	\$0	\$0	\$0	\$0	\$1,644,000	\$1,644,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$1,188,000	\$1,188,000
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$4,462,000	\$4,462,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> Placentia Avenue, between Hospital & Superior (F)	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works - Engineering	<i>Project No.:</i> ST-16

Project Description:

The project consists of the widening of Placentia Avenue to two lanes in each direction. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity and accommodates general new development. Half of the project costs will benefit regional development. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This segment of arterial roadway is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program - Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$425,000	\$425,000
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$1,449,500	\$1,449,500
<i>Construction</i>	\$0	\$0	\$0	\$0	\$1,640,500	\$1,640,500
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$1,275,000	\$1,275,000
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$4,790,000	\$4,790,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> 15th Street between Placentia to Monrovia (G)	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works – Engineering	<i>Project No.:</i> ST-17

Project Description:

The project consists of the widening of 15th Street to two lanes in each direction. These improvements are required to accommodate the additional projected traffic volumes partially resulting from General Plan development. The project increases circulation system capacity and accommodates general new development. The project is consistent with the City's Master Plan of Streets and Highways (MPSH). Roughly 25% of the improvement costs will benefit the adjacent property and will most likely be required as a condition of approval for reuse of this site.

Justification/Requirement for Project:

This segment of arterial roadway is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$522,000	\$522,000
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$1,370,800	\$1,370,800
<i>Construction</i>	\$0	\$0	\$0	\$0	\$2,421,200	\$2,421,200
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$1,566,000	\$1,566,000
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$5,880,000	\$5,880,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: MacArthur, Southerly of San Miguel to Coast Highway (H)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works – Engineering	Project No.: ST-18

Project Description:

The improvements include three through lanes in each direction in this major street segment. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity and accommodates general new development. Half of the project costs will benefit regional development. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This segment of arterial roadway is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$237,500	\$237,500
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$0	\$0
<i>Construction</i>	\$0	\$0	\$0	\$0	\$1,722,000	\$1,722,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$712,500	\$712,500
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$2,672,000	\$2,672,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: 17th Street from Westerly Terminus to Bluff Road (J)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works – Engineering	Project No.: ST-19

Project Description:

The project improvements consist of the extension of 17th Street westerly to connect with the future Bluff Road. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity and, barring additional knowledge about contiguous development, accommodates development through-out the City. The project is consistent with the City Master Plan of Streets and Highways (MPSH). One quarter of the cost of the improvements are attributable to City-wide growth with the remainder benefitting regional growth and adjacent development.

Justification/Requirement for Project:

This segment of arterial roadway is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$821,750	\$821,750
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$2,504,500	\$2,504,500
<i>Construction</i>	\$0	\$0	\$0	\$0	\$963,000	\$963,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$2,465,250	\$2,465,250
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$6,754,500	\$6,754,500

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: Bluff Road between 17th Street to Coast Highway (K)	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works – Engineering	Project No.: ST-20

Project Description:

This project consists of the construction of Bluff Road to the standards of a four lane Secondary Arterial roadway. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity. Roughly 25% of the improvement cost is included in (and accommodates) City-wide development with 25% specifically benefitting adjacent development and the remaining 50% benefitting regional growth. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This segment of arterial roadway is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$8,069,500	\$8,069,500
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$24,580,500	\$24,580,500
<i>Construction</i>	\$0	\$0	\$0	\$0	\$9,522,000	\$9,522,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$24,208,500	\$24,208,500
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$66,380,500	\$66,380,500

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> 19th Street to Brookhurst (N)	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works – Engineering	<i>Project No.:</i> ST-21

Project Description:

This improvement consists of the extension of 19th Street from its westerly terminus over the Santa Ana riverbed. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity. A quarter of the improvement costs are included in (and benefits) the City-wide cost distribution with the remainder being financed by regional improvement funds or adjacent development. Half of the project costs will benefit regional development. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This segment of arterial roadway is required to complete the City's Master Plan of Streets and Highways (MPSH) and will assist in accommodating the over 20% increase in daily trip-miles at General Plan build-out resulting from new development. This segment of roadway or intersection will provide an alternative for drivers who have been displaced from other roadway segments, unable to be widened, that they have previously been able to use but now find at maximum carrying capacity.

Consequences of Not Completing Project:

Failure to construct this portion of the MPSH will result in the need for widening Coast Highway as well as improvements at the intersection of Coast Highway at Balboa Boulevard/Superior Avenue. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$0	\$0
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$0	\$0
<i>Construction</i>	\$0	\$0	\$0	\$0	\$55,586,717	\$55,586,717
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$0	\$0
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$55,586,717	\$55,586,717

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> Arches Interchange Improvements	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works - Engineering	<i>Project No.:</i> ST-22

Project Description:

This project consists of improving ramp capacity and constructing through lanes on Pacific Coast Highway and Newport Boulevard to conform with the approved design concept. The project also reconfigures Old Newport Boulevard to connect directly to Santa Ana Avenue. These improvements are required to accommodate the additional projected traffic volumes resulting from General Plan development. The project increases circulation system capacity. One half of the improvement costs are included in (and accommodates) City-wide development with the remainder being financed by regional improvement funds. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This improvement will increase the capacity of this key circulation system component which has been identified as the busiest intersection in Orange County. The City can expect a 20% increase in the number of daily trip-miles from the current 1,881,341 daily trip-miles to the roughly 2,267,550 daily trip-miles, an increase of 386,209 daily trip-miles. The are limits as to how many additional lane miles can be constructed, thus optimum configuration of this interchange is necessary to complement the existing lane miles of arterial roadways.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program - Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$1,707,500	\$1,707,500
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$0	\$0
<i>Construction</i>	\$0	\$0	\$0	\$0	\$6,830,000	\$6,830,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$5,122,500	\$5,122,500
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$13,660,000	\$13,660,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: Intelligent Transportation System	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works - Engineering	Project No.: ST-23

Project Description:

This project consists of the installation of Intelligent Transportation System (ITS) components at key locations that will be impacted by increased traffic. Included are items such as CCTV cameras, traffic operation center improvements and equipment upgrades at signalized intersections. These improvements are required to accommodate the reduction of required pedestrian crossing time on six and eight lane major roads. As a result, the project increases circulation system capacity. One half of the improvement costs are included in (and accommodates) City-wide development with the remainder being financed by regional improvement funds. The project is consistent with the City's Master Plan of Streets and Highways (MPSH). Due to the timeframe of this project, at least two cycles of ITS upgrades will be required.

Justification/Requirement for Project:

This project will maximize traffic flow on the roadway network. It will provide the City with the latest tools to coordinate traffic signals, timely identify problems and respond to unanticipated traffic congestion. The City can expect a 20% increase in the number of daily trip-miles over the existing. There are limits as to how many additional lane miles can be constructed, thus optimum configuration of this interchange is necessary to complement the existing lane miles of arterial roadways. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program - Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$1,071,000	\$1,071,000
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$0	\$0
<i>Construction</i>	\$0	\$0	\$0	\$0	\$4,284,000	\$4,284,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$3,213,000	\$3,213,000
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$8,568,000	\$8,568,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

<i>Project Title:</i> Pedestrian Improvements	<i>Program:</i> Circulation (streets, signals and bridges) System
<i>Submitting Department(s):</i> Public Works – Engineering	<i>Project No.:</i> ST-24

Project Description:

The project will enhance pedestrian safety and circulation at key areas and includes improvements such as pedestrian over-crossings and signalized pedestrian crossings that are necessary due to maximization of major street widths. These improvements are required to accommodate the reduction of required pedestrian crossing time and/or control and coordinate pedestrian crossing with adjacent traffic signals. As a result, the project increases circulation system capacity. One half of the improvement costs are included in (and benefits) the City-wide cost distribution with the remainder being financed by regional improvement funds. The project is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

These pedestrian improvements will increase the capacity of the road network. Relocating pedestrian crossings and/or coordinating them with adjacent signals reduces the conflicts between pedestrian and motorists allowing smoothed traffic flow.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

<i>PROPOSED EXPENDITURES</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15 through Build-out</i>	<i>Total all Years</i>
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$1,500,000	\$1,500,000
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$0	\$0
<i>Construction</i>	\$0	\$0	\$0	\$0	\$6,000,000	\$6,000,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$4,500,000	\$4,500,000
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$12,000,000	\$12,000,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

City of Newport Beach Master Facilities Plan Project Detail

Project Title: Grade Separation at Jamboree/MacArthur	Program: Circulation (streets, signals and bridges) System
Submitting Department(s): Public Works – Engineering	Project No.: ST-25

Project Description:

The project consists of the construction of an echelon style interchange with one side of each roadway elevated and the other side remaining at-grade. This design accommodates the traffic demands as well as the angle at the intersection the two roadways. Roughly one-half of the project cost will benefit regional growth with the remaining costs split 38% between City-wide development and 12% with the City of Irvine (as a portion of the intersection is in that City). The project accommodates projected growth in traffic volumes projected in the General Plan and is consistent with the City's Master Plan of Streets and Highways (MPSH).

Justification/Requirement for Project:

This intersection improvement is required to accommodate regional and General Plan development at the City's adopted level of service. The City can expect a 20% increase in the number of daily trip-miles from the current 1,881,341 daily trip-miles to roughly 2,267,550 daily trip-miles, an increase of 386,209 daily trip miles. There are limits as to how many additional lane miles can be constructed, thus optimum lane mile configuration, turn pockets and pedestrian safety is absolutely necessary to complement the existing lane miles of existing major streets.

Consequences of Not Completing Project:

Failure or inability to widen thoroughfares or make other circulation improvements where warranted and needed would reduce the Level of Service (LOS) traffic flow along these street segments to Level E or F by acting as a bottleneck. Level E is "Unstable Flow", and is identified as "long queues of vehicles waiting upstream of the intersection". Level F, "Forced Flow" creates "jammed conditions, back-ups from other locations which restrict or prevent movement".

Reference Document:

City of Newport Fair Share Fee Program – Intersection Improvement Preliminary Cost Estimates and MPHS (Master Plan of Streets and Highways).

Project Timing:

The timing or scheduling of the capital construction or capital outlay acquisition described herein, was not included in the scope of this engagement, thus all project cost default to the "Build-out" column.

PROPOSED EXPENDITURES	2010-11	2011-12	2012-13	2013-14	2014-15 through Build-out	Total all Years
<i>Design/Engineering/Admin.</i>	\$0	\$0	\$0	\$0	\$6,756,500	\$6,756,500
<i>Land Acquisition/Right of Way</i>	\$0	\$0	\$0	\$0	\$0	\$0
<i>Construction</i>	\$0	\$0	\$0	\$0	\$27,026,000	\$27,026,000
<i>Contingency</i>	\$0	\$0	\$0	\$0	\$20,269,500	\$20,269,500
<i>Equipment/Other</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$0	\$0	\$0	\$0	\$54,052,000	\$54,052,000

Potential Funding Sources:

Circulation (streets, signals and bridges) System Fair Share Fees, General Fund receipts, miscellaneous grants or potentially a specifically-defined tax measure.

Appendix B

Expanded Land-use Database

Appendix B

City of Newport Beach

2009-10 Fair Share (development impact) Fee Calculation and Nexus Report

Land Use Database – Summary of All Sections

Detail – Entire City	Existing Development # of Units	Anticipated Development # of Units	Total G.P. Development # of Units
Low Density Dwellings	18,702	1,321	20,023
Medium Density Dwellings	10,974	4,696	15,670
Apartment Dwellings	9,703	5,374	15,077
Mobile Home Dwellings	600	(145)	455
Elderly Residential Dwellings	200	120	320
Motel Units	134	5	139
Hotel Units	3,231	2,216	5,447
Fast Food Restaurant	15,640	(1,700)	13,940
Restaurant	99,450	59,460	158,910
Regional Commercial	1,331,000	288,525	1,619,525
General Commercial	3,823,398	1,462,211	5,285,609
Auto Dealer/Sales	201,300	43,350	244,650
Yacht Club	51,830	18,480	70,310
Theater	5,489	76	5,565
Health Club	16,770	76,280	93,050
General Office	11,657,109	(264,743)	11,392,366
Medical/Gov't. Office	959,718	545,383	1,505,101
Church	377,780	104,074	481,854
Research/Development	81,730	0	81,730
Pre-school/Day Care	48,050	950	49,000
Elementary/Private School	4,999	56	5,055
Industrial	1,291,079	(143,630)	1,147,449
Mini-Storage/Warehouse	196,420	1,000	197,420
Hospital	1,031	970	2,001
Nursing/Conv. Homes	661	(593)	68
Newport Dunes	64	0	64
Commercial/Recreational	5	0	5
Tennis Club	60	2	62

Appendix C

Calculation of Trip-miles

Appendix C

City of Newport Beach

2009-10 Fair Share (development impact) Fee Calculation and Nexus Report

Calculation of Trip-miles, by Land-use

Specific Land-use	Total Units	Trip-ends per Unit	Percent of Diverted Trip-ends	Diverted Trip-ends % Adjustment	Diverted Trip-ends Percent	Percent of Pass-by Trips (1)	Combined Diverted and Pass-by TE's	Remaining Trip TE's % as "Adjustment %"	Adjusted T.E. ate, Adjustmen % X Total Trips	Average Trip Length	Trip-ends X 50.0% X Length	Total Units by Land-use	Total Trip-miles by Land-use	Average Trip-miles per Unit
Low Density Dwellings	18,702	7.50	11.0	50.0%	5.5	3.0	8.5	91.50%	6.86	7.9	27.1	18,702	506,824	27.10
Medium Density Dwellin	10,974	5.64	11.0	50.0%	5.5	3.0	8.5	91.50%	5.16	7.9	20.4	10,974	223,870	20.40
Apartment Dwellings	9,703	5.37	11.0	50.0%	5.5	3.0	8.5	91.50%	4.91	7.9	19.4	9,703	188,238	19.40
Mobile Home Dwellings	600	4.06	11.0	50.0%	5.5	3.0	8.5	91.50%	3.71	7.9	14.7	600	8,820	14.70
Elderly Residential Dwell	200	4.90	11.0	50.0%	5.5	3.0	8.5	91.50%	4.48	7.9	17.7	200	3,540	17.70
Hotel Units	134	7.58	38.0	50.0%	19.0	4.0	23.0	77.00%	5.84	7.6	22.2	134	2,975	
Motel Units	3,231	6.08	38.0	50.0%	19.0	4.0	23.0	77.00%	4.68	7.6	17.8	3,231	57,512	
Totals/Average												3,365	60,487	17.98
Restaurant	99,450	51.18	37.0	50.0%	18.5	12.0	30.5	69.50%	35.57	4.7	83.6	99,450	8,314,020	
Fast Food Restaurant	15,640	62.78	37.0	50.0%	18.5	12.0	30.5	69.50%	43.63	4.7	102.5	15,640	1,603,100	
Totals/Average												115,090	9,917,120	86.17
Regional Commercial	1,331,000	23.48	35.0	50.0%	17.5	11.0	28.5	71.50%	16.79	5.2	43.7	1,331,000	58,164,700	43.70
General Commercial	3,823,398	38.24	45.0	50.0%	22.5	15.0	37.5	62.50%	23.90	3.6	43.0	3,823,398	164,406,114	
Auto Dealer/Sales	201,300	34.84	51.0	50.0%	25.5	28.0	53.5	46.50%	16.20	2.8	22.7	201,300	4,569,510	
Yacht Club	51,830	22.71	45.0	50.0%	22.5	15.0	37.5	62.50%	14.19	6.3	44.7	51,830	2,316,801	
Theater (seats)	5,489	0.34	45.0	50.0%	22.5	15.0	37.5	62.50%	0.21	6.1	0.60	5,489	3,293	
Health Club	16,770	22.71	45.0	50.0%	22.5	15.0	37.5	62.50%	14.19	8.8	62.4	16,770	1,046,448	
Totals/Average												4,098,787	172,342,166	42.05
General Office	11,657,109	11.08	19.0	50.0%	9.5	4.0	13.5	86.50%	9.58	8.8	42.2	11,657,109	491,930,000	
Medical Office	959,718	17.38	19.0	50.0%	9.5	4.0	13.5	86.50%	15.03	6.4	48.1	959,718	46,162,436	
Churches/Centers	377,780	6.09	19.0	50.0%	9.5	2.0	11.5	88.50%	5.39	5.1	13.7	377,780	5,175,586	
Research/Development	81,730	7.10	19.0	50.0%	9.5	4.0	13.5	86.50%	6.14	11.7	35.9	81,730	2,934,107	
Pre-school/Day Care	48,050	29.05	19.0	50.0%	9.5	2.0	11.5	88.50%	25.71	4.3	55.3	48,050	2,657,165	
Elementary/Private Sch	4,999	1.30	19.0	50.0%	9.5	2.0	11.5	88.50%	1.15	4.3	2.50	4,999	12,498	
Totals/Average												13,129,386	548,871,792	41.80
Industrial	1,291,079	5.48	19.0	50.0%	9.5	2.0	11.5	88.50%	4.85	9.0	21.80	1,291,079	28,145,522	21.80
Mini-Storage/Warehouse	196,420	4.61	19.0	50.0%	9.5	2.0	11.5	88.50%	4.08	9.0	18.40	196,420	3,614,128	18.40
Hospital	1,031	13.57	19.0	50.0%	9.5	2.0	11.5	88.50%	12.01	8.3	49.80	1,031	51,344	
Nursing/Conv. Homes	661	2.00	19.0	50.0%	9.5	2.0	11.5	88.50%	1.77	8.3	7.30	661	4,825	
Totals/Average												1,692	56,169	33.20
Commercial/Recreation	5.1	37.07	45.0	50.0%	22.5	15.0	37.5	62.50%	23.17	6.3	73.00	5	372	
Newport Dunes	64.0	20.02	39.0	50.0%	19.5	9.0	28.5	71.50%	14.31	6.3	45.10	64	2,886	
Totals/Average												69	3,258	47.15
Tennis Club (courts)	60	25.26	39.00	50.0%	19.50	9.0	28.5	71.50%	18.06	6.3	56.90	60	3,414	
Marina (slips)	1,055	2.39	39.00	50.0%	19.50	9.0	28.5	71.50%	1.71	6.3	5.40	1,055	5,697	
Totals/Average												1,115	9,111	8.17

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