



CITY OF ST. AUGUSTINE

# MOBILITY PLAN & MOBILITY FEE TECHNICAL REPORT

FEBRUARY 2022



  
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INC.



# CITY OF ST. AUGUSTINE

## MOBILITY PLAN

### &

## MOBILITY FEE

TECHNICAL REPORT  
FEBRUARY 2022

Produced for: City of St. Augustine



CITY OF  
**ST. AUGUSTINE**  
— EST. 1565 —

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February 4th, 2022

Amy Skinner  
Director of Planning & Building  
City of St. Augustine  
City Hall  
75 King Street, 4th Floor  
St, Augustine, FL 32084

**Re: City of St. Augustine Mobility Plan & Mobility Fee Technical**

Dear Ms. Skinner:

Enclosed is the draft technical report for the City of St. Augustine Mobility Plan and Mobility Fee. This is a final draft prepared for consideration by the City Commission based on the most recent and localized data consistent with Florida Statute. The Mobility Fee is based upon the multimodal projects included in the City's Mobility Plan, which was adopted into the Comprehensive Plan in 2020. The Mobility Fee is consistent with all legal and statutory requirements and meets the dual rational nexus test and the rough proportionality test.

The adoption of the Mobility Fee through an implementing ordinance will require two hearings before the City Commission. The implementing ordinance can be formally adopted at the second hearing. There may be follow on initiatives related to mobility fee administrative procedures, service charges, and mobility performance assessment and standards. It has been my pleasure to work with City Staff on outreach efforts and finalizing the City's Mobility Plan and Mobility Fee.

Sincerely,

Jonathan B. Paul, AICP  
Principal



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## OVERVIEW

The City of St. Augustine, founded in September 1565 by Don Pedro Menendez de Aviles of Spain, is the longest continually inhabited European-founded city in the United States. The St. Augustine Town Plan Historic District, a U.S. National Historic Landmark District, features a distinct layout based on the Spanish 1573 Laws of the Indies, and features a largely intact historic grid of narrow streets emanating out from the 16th century Plaza de la Constitución, referred to by some as the “heart of the ancient city”.

The 2040 Mobility Plan honors the historic grid and brings together various City initiatives to further emphasize the walkability of the Historic Districts and to encourage creating a park once environment that promotes visitors parking outside of the Districts and using various multimodal transportation options to explore the City. The Mobility Plan serves as the basis for establishment of a mobility fee system, an alternative to transportation concurrency enacted by the Florida Legislature, that allows new development activity to mitigate its traffic impact to a local governments transportation system through payment of a one-time fee.

The Mobility Plan, adopted in 2020 through amendments to the City’s Comprehensive Plan, promotes the continued transition from a transportation system focused on moving cars towards a multimodal system focused on providing people with enhanced mobility choices to walk, bike, ride a trolley, or use new forms of transportation to move about the City. The amendments also encourage the continuance of innovative parking management strategies to provide City’s residents with enhanced access to business and services, while also seeking to reduce the impact of traffic on neighborhood streets.

The 2040 Mobility Plan consist of four (4) distinct plans that include multimodal projects for sidewalks, paths, trails, protected bike lanes, low speed shared streets, complete streets, and multimodal ways. The plans address both citywide and regional mobility through microtransit circulators, multimodal parking structures, water taxis, an aerial tramway, regional rail that will connect St. Augustine with Jacksonville, and several regional road projects to direct regional cut-through traffic around the City. One of the most significant features of the 2040 Plan was the replacement of road level of service (LOS) standards, used in transportation concurrency to plan for adding road capacity, with street quality of service (QOS) standards, to encourage slower speeds to make it safer for people to walk, bicycle, and access transit and trolley circulator services. This Technical Report expands on the development of the 2040 Mobility Plan and documents the methodology used to develop a City mobility fee that meets legally established dual rational nexus and rough proportionality test and demonstrates how the Mobility Plan and Fee comply with the requirements of Florida Statutes 163.3180 and 163.31801.



## **LEGISLATIVE BACKGROUND**

The State of Florida passed the Growth Management Act of 1985 that required all local governments in Florida to adopt Comprehensive Plans to guide future development. The Act mandated that adequate public facilities must be provided “concurrent” with the impacts of new development. State mandated “concurrency” was adopted to ensure the health, safety and general welfare of the public by ensuring that adequate public facilities would be in place to accommodate the demand for public facilities created by new development.

Transportation concurrency became the measure used by the Florida Department of Community Affairs (DCA), Florida Department of Transportation (FDOT), Regional Planning Councils (RPCs), and local governments to ensure that adequate public facilities, in the form of road capacity, was available to meet the transportation demands from new development. To meet the travel demand impacts of new development and be deemed “concurrent”, transportation concurrency was primarily addressed by constructing new roads and widening existing roads.

Traditional transportation concurrency allowed governmental entities to deny development where road capacity was not available to meet the travel demands from new development. Transportation concurrency also allowed governmental entities to require that developments be timed or phased concurrent with the addition of new road capacity. In addition, transportation concurrency also allowed governmental entities to require new development to improve (widen) roads that were already overcapacity (aka “deficient” or “backlogged”).

In urban areas throughout Florida, traditional transportation concurrency had the unintended consequence of limiting and stopping growth in urban areas. This occurred because roads were often over capacity based on traffic already on the roads or the combination of that traffic and trips from approved developments. Further, the ability to add road capacity in urban areas was more limited as right-of-way was often constrained by existing development and utilities, physical barriers, and environmental protections. Stopping development in urban areas encouraged suburban sprawl by forcing new development to suburban and rural areas where road capacity was either readily available or cheaper to construct. In the late 90’s, as the unintended impact of transportation concurrency became more apparent, the Legislature adopted Statutes to provide urban areas with alternatives to address the impact of new development through Transportation Concurrency Exception Areas (TCEA) and Transportation Concurrency Management Areas (TCMA).



The intent of TCEAs and TCMAs was to allow local governments alternative solutions to provide mobility within urban areas by means other than providing road capacity and to allow infill and redevelopment in urban areas. In the mid 2000's, Florida experienced phenomenal growth that strained the ability of local governments to provide the necessary infrastructure to accommodate that growth. Many communities across the State started to deny new developments, substantially raise impact fees and require significant transportation capacity improvements. In 2005, the Legislature enacted several laws that weakened the ability of local governments to implement transportation concurrency by allowing new development to make proportionate share payments to mitigate its travel demand. The Legislature also introduced Multi-Modal Transportation Districts (MMTD) for areas that did not meet requirements to qualify for TCEAs or TCMAs.

In 2007, the Florida Legislature introduced the concept of mobility plans and mobility fees to allow development to equitably mitigate its impact and placed additional restrictions on the ability of local governments to charge new development for over capacity roadways. The Legislature directed the Florida Department of Community Affairs (DCA) and the Florida Department of Transportation (FDOT) to evaluate mobility plans and mobility fees and report the finding to the Legislature in 2009.

In 2009, the Legislature designated Dense Urban Land Areas (DULA), which are communities with a population greater than 1,000 persons per square mile, as TCEA's. The Legislature accepted the findings of the DCA and FDOT analysis for mobility plans and mobility fees but did not take any formal action as the State was in the great recession. The Legislature also placed further restrictions on local government's ability to implement transportation concurrency, by adding direction on how to calculate proportionate share and how overcapacity roads are addressed.

In 2011, the Florida Legislature through House Bill (HB) 7207 adopted the "Community Planning Act" which implemented the most substantial changes to Florida's growth management laws since the 1985 "Local Government Comprehensive Planning and Land Development Regulation Act," which had guided comprehensive planning in Florida for decades. The 2011 legislative session eliminated State mandated concurrency, made concurrency optional for local governments, and eliminated the Florida Department of Community Affairs (DCA) and replaced it with the Florida Department of Economic Opportunity (DEO). The Act essentially removed the DEO, Florida Department of Transportation (FDOT), and Regional Planning Councils (RPC) from the transportation concurrency review process. Although local governments are still required to adopt and implement a comprehensive plan, the requirements changed significantly and shifted more discretion to local governments to plan for mobility within their community and enacted further restrictions on the implementation of transportation concurrency, proportionate share and backlogged roads.



The Florida Legislature did not include any provisions in HB 7207 exempting any local governments existing transportation concurrency system from meeting these new requirements when it elected to abolish statewide transportation concurrency and make transportation concurrency optional for local governments. Florida Statute Section 163.3180(1) provides local governments with flexibility to establish concurrency requirements:

*“Sanitary sewer, solid waste, drainage, and potable water are the only public facilities and services subject to the concurrency requirement on a statewide basis. Additional public facilities and services may not be made subject to concurrency on a statewide basis without approval by the Legislature; however, any local government may extend the concurrency requirement so that it applies to additional public facilities within its jurisdiction”.*

House Bill 319, passed by the Florida Legislature in 2013, amended the Community Planning Act and brought about more changes in how local governments could implement transportation concurrency and further recognized the ability of local governments to adopt alternative mobility funding systems, such as mobility plans and associated mobility fees, to allow development, consistent with an adopted Comprehensive Plan, to equitably mitigate its travel demand impact. The Community Planning Act also includes specific requirements for any local government that elects to maintain transportation concurrency. These requirements are to be addressed in the local governments comprehensive plan and capital improvements required to meet adopted level of service standards are required to be included in the capital improvements element five (5) year schedule. The Legislature also clarified in the Community Planning Act that any backloged facility is the responsibility of local governments; new development shall not be charged for backlog, and that new developments can assume any backloged facility will be addressed by local governments when calculating its proportionate share mitigation. This essentially means it is the local governments responsibility to fund improvements to deficient transportation facilities.

The Community Planning Act recognized that impact fees, mobility fees, and other transportation concurrency mitigation requirements are equivalent forms of transportation mitigation by requiring that dollar-for-dollar credit shall be provided where a local government requires a development to make a proportionate share improvement or payment per Florida Statute Section 163.3180 (5)(h)2.e. that states:

*“The applicant shall receive a credit on a dollar-for-dollar basis for impact fees, mobility fees, and other transportation concurrency mitigation requirements paid or payable in the future for the project. The credit shall be reduced up to 20 percent by the percentage share that the project’s traffic represents of the added capacity of the selected improvement, or by the amount specified by local ordinance, whichever yields the greater credit.”*



In 2019, the Florida Legislature, through House Bill 7103, amended the Community Planning Act and required mobility fees to be governed by the same procedures as impact fees. This amendment further confirmed that mobility fees are an alternative to impact fees that allow development to mitigate its impact to the transportation system consistent with the needs identified in the local governments adopted mobility plan. Florida Statute Section 163.3180(5)(i) states:

*“If a local government elects to repeal transportation concurrency, it is encouraged to adopt an alternative mobility funding system that uses one or more of the tools and techniques identified in paragraph (f). Any alternative mobility funding system adopted may not be used to deny, time, or phase an application for site plan approval, plat approval, final subdivision approval, building permits, or the functional equivalent of such approvals provided that the developer agrees to pay for the development’s identified transportation impacts via the funding mechanism implemented by the local government. The revenue from the funding mechanism used in the alternative system must be used to implement the needs of the local government’s plan which serves as the basis for the fee imposed. A mobility fee-based funding system must comply with s. 163.31801 governing impact fees. An alternative system that is not mobility fee-based shall not be applied in a manner that imposes upon new development any responsibility for funding an existing transportation deficiency as defined in paragraph (h).”*

The Community Planning Act encourages any local government that continues to implement transportation concurrency to mitigate the impact to infill, redevelopment and development within urban areas. The Community Planning Act also encourages local governments that elect to either implement transportation concurrency within urban areas or repeal transportation concurrency and adopt an alternative mobility funding system using to adopt one or more of the following tools and techniques identified in Florida Statute Section 163.3180(5)(f):

- “1. Adoption of long-term strategies to facilitate development patterns that support multimodal solutions, including urban design, appropriate land use mixes, intensity and density.*
- 2. Adoption of an area wide level of service not dependent on any single road segment function.*
- 3. Exempting or discounting impacts of locally desired development, such as development in urban areas, redevelopment, job creation, and mixed use on the transportation system.*
- 4. Assigning secondary priority to vehicle mobility and primary priority to ensuring a safe, comfortable, and attractive pedestrian environment with convenient interconnection to transit.*
- 5. Establishing multimodal level of service standards that rely primarily on non-vehicular modes of transportation where existing or planned community design will provide adequate a level of mobility.*
- 6. Reducing impact fees or local access fees to promote development within urban areas, multimodal districts, and a balance of mixed-use development in certain areas or districts, or for affordable or workforce housing.”*



## **IMPACT & MOBILITY FEE COMPARISON**

The Florida Constitution grants local governments broad home rule authority to establish special assessments, impact fees, mobility fees, franchise fees, user fees, and service charges as revenue sources to fund specific governmental functions and capital infrastructure. Payment of impact fees or mobility fees are one of the primary ways local governments can require new development, along with redevelopment or expansion of existing land uses which generates additional transportation demand, to mitigate its impact to a local governments transportation system. While road impact fees and mobility fees are both intended to be means in which a development can mitigate its transportation impact, the following are the major differences between the two fees:

### **Road Impact Fees**

- Partially or fully fund road capacity improvements, including new roads, the widening of existing roads, and the addition or extension of turn lanes at intersections to move people driving vehicles (i.e., cars, trucks, SUVs, motorcycles).
- Are based on increases in trip generation, vehicle trip length, and road capacity, along with the cost of road capacity improvements and the projected vehicle miles of travel from development.
- Maybe based on either an adopted LOS standard (aka standards or consumption-based fee) or on future road improvements (aka plan or improvements-based fee).

### **Mobility Fees**

- Pay for the cost associated with adding new multimodal capacity to move people walking, bicycling, scooting, riding transit, driving vehicles or using shared mobility technology.
- Partially or fully fund multimodal projects, including sidewalks, paths, trails, bike lanes, streetscape and landscape, complete and low speed streets, micromobility (i.e., electric bikes, electric scooters) devices, programs and services, microtransit (i.e., golf carts, neighborhood electric vehicles, autonomous transit shuttles, trolleys) circulators, services and vehicles, new roads, the widening of existing roads, and turn lanes, signals and ADA upgrades at intersections.
- Are based on increases in person trips, person trip lengths, and person miles of capacity from multimodal projects, along with projected person miles of travel from development.
- Assessment areas may include all or portions of a municipality or county, and may vary based on geographic location (e.g., downtown) or type of development (e.g., mixed-use).
- Must be based on future multimodal projects adopted as part of a mobility plan and incorporated or referenced in the local governments Comprehensive Plan.



## LEGAL

Before the Florida “Impact Fee Act” was adopted, many local governments had already developed impact fees through their home rule powers. In 2006, the Legislature adopted the “Impact Fee Act” to provide process requirements for the adoption of impact fees and formally recognized the authority of local governments to adopt impact fees. Prior to 2006, the Florida Legislature, unlike many States throughout the U.S. that had adopted enabling legislation, elected to defer to the significant case law that had been developed in both Florida and throughout the U.S. to provide guidance to local governments to adopt impact fees.

In 2009, the Legislature made several changes to the “Impact Fee Act”, the most significant of which was placing the burden of proof on local governments, through a preponderance of the evidence, that the imposition of the fee meets legal precedent and the requirements of Florida Statute Section 163.31801. Prior to the 2009 amendment, Courts generally deferred to local governments as to the validity of an imposed impact fee and placed the burden of proof, that an imposed impact fee was invalid or unconstitutional on the plaintiff. There has yet to be a legal challenge to impact fees in Florida since the 2009 legislation, due in large part to the great recession and the fact that many local governments either reduced impact fees or placed a moratorium on impact fees between 2009 and 2015.

In 2019, the Legislature, through HB 207 and HB 7103, made several changes to the “Impact Fee Act”, the most significant of which was the requirement that fees not be collected before building permit issuance. The changes also expanded on the requirements of the dual rational nexus test, the collection and expenditure of fees, credits for improvements and administrative cost.

In 2020, the Legislature, through SB 1066, made several additional changes to the Impact Fee Act to clarify that new or updated impact fees cannot be assessed on a permit if the permit application was pending prior to the new or updated fee. The bill also made credits assignable and transferable to third parties.

In 2021, the Legislature, through HB 337 made significant amendments to the “Impact Fee Act”, which the Governor subsequently approved. The amendments require that impact fees be based on planned improvements and that there is a clear nexus between the need for improvements and the impact from new development. The amendments have a greater impact on increases to existing impact fees and have phasing requirements for increases to existing fees. There are provisions that allow a local government to fully implement updated fees based on a finding of extraordinary circumstances. Florida Statute Section 163.31801 now reads as follows:



- “(1) This section may be cited as the “Florida Impact Fee Act.”*
- (2) The Legislature finds that impact fees are an important source of revenue for a local government to use in funding the infrastructure necessitated by new growth. The Legislature further finds that impact fees are an outgrowth of the home rule power of a local government to provide certain services within its jurisdiction. Due to the growth of impact fee collections and local governments’ reliance on impact fees, it is the intent of the Legislature to ensure that, when a county or municipality adopts an impact fee by ordinance or a special district adopts an impact fee by resolution, the governing authority complies with this section.*
- (3) For purposes of this section, the term:*
- (a) "Infrastructure" means a fixed capital expenditure or fixed capital outlay, excluding the cost of repairs or maintenance, associated with the construction, reconstruction, or improvement of public facilities that have a life expectancy of at least 5 years; related land acquisition, land improvement, design, engineering, and permitting costs; and other related construction costs required to bring the public facility into service. The term also includes a fire department vehicle, an emergency medical service vehicle, a sheriff's office vehicle, a police department vehicle, a school bus as defined in s. 1006.25, and the equipment necessary to outfit the vehicle or bus for its official use. For independent special fire control districts, the term includes new facilities as defined in s. 191.009(4).*
  - (b) "Public facilities" has the same meaning as in s. 163.3164 and includes emergency medical, fire, and law enforcement facilities.*
- (4) At a minimum, each local government that adopts and collects an impact fee by ordinance and each special district that adopts, collects, and administers an impact fee by resolution must:*
- (a) Ensure that the calculation of the impact fee is based on the most recent and localized data.*
  - (b) Provide for accounting and reporting of impact fee collections and expenditures and account for the revenues and expenditures of such impact fee in a separate accounting fund.*
  - (c) Limit administrative charges for the collection of impact fees to actual costs.*
  - (d) Provide notice at least 90 days before the effective date of an ordinance or resolution imposing a new or increased impact fee. A local government is not required to wait 90 days to decrease, suspend, or eliminate an impact fee. Unless the result is to reduce the total mitigation costs or impact fees imposed on an applicant, new or increased impact fees may not apply to current or pending permit applications submitted before the effective date of a new or increased impact fee.*
  - (e) Ensure that collection of the impact fee may not be required to occur earlier than the date of issuance of the building permit for the property that is subject to the fee.*





- (f) *Ensure that the impact fee is proportional and reasonably connected to, or has a rational nexus with, the need for additional capital facilities and the increased impact generated by the new residential or commercial construction.*
  - (g) *Ensure that the impact fee is proportional and reasonably connected to, or has a rational nexus with, the expenditures of the funds collected and the benefits accruing to the new residential or nonresidential construction.*
  - (h) *Specifically earmark funds collected under the impact fee for use in acquiring, constructing, or improving capital facilities to benefit new users.*
  - (i) *Ensure that revenues generated by the impact fee are used, in whole or in part, to pay existing debt or for previously approved projects unless the expenditure is reasonably connected to, or has a rational nexus with, the increased impact generated by the new residential or nonresidential construction.*
- (5)(a) *Notwithstanding any charter provision, comprehensive plan policy, ordinance, development order, development permit, or resolution, the local government or special district must credit against the collection of the impact fee any contribution, whether identified in a proportionate share agreement or other form of exaction, related to public facilities or infrastructure, including land dedication, site planning and design, or construction. Any contribution must be applied on a dollar-for-dollar basis at fair market value to reduce any impact fee collected for the general category or class of public facilities or infrastructure for which the contribution was made.*
- (b) *If a local government or special district does not charge and collect an impact fee for the general category or class of public facilities or infrastructure contributed, a credit may not be applied under paragraph (a).*
- (6) *A local government, school district, or special district may increase an impact fee only as provided in this subsection.*
  - (a) *An impact fee may be increased only pursuant to a plan for the imposition, collection, and use of the increased impact fees which complies with this section.*
  - (b) *An increase to a current impact fee rate of not more than 25 percent of the current rate must be implemented in two equal annual increments beginning with the date on which the increased fee is adopted.*
  - (c) *An increase to a current impact fee rate which exceeds 25 percent but is not more than 50 percent of the current rate must be implemented in four equal installments beginning with the date the increased fee is adopted.*
  - (d) *An impact fee increase may not exceed 50 percent of the current impact fee rate.*
  - (e) *An impact fee may not be increased more than once every 4 years.*





- (f) *An impact fee may not be increased retroactively for a previous or current fiscal or calendar year.*
- (g) *A local government, school district, or special district may increase an impact fee rate beyond the phase-in limitations established under paragraph (b), paragraph (c), paragraph (d), or paragraph (e) by establishing the need for such increase in full compliance with the requirements of subsection (4), provided the following criteria are met:*
  - 1. *A demonstrated need study justifying any increase in excess of those authorized in paragraph (b), paragraph (c), paragraph (d), or paragraph (e) has been completed within the 12 months before the adoption of the impact fee increase and expressly demonstrates the extraordinary circumstances necessitating the need to exceed the phase-in limitations.*
  - 2. *The local government jurisdiction has held not less than two publicly noticed workshops dedicated to the extraordinary circumstances necessitating the need to exceed the phase-in limitations set forth in paragraph (b), paragraph (c), paragraph (d), or paragraph (e).*
  - 3. *The impact fee increase ordinance is approved by at least a two-thirds vote of the governing body.*
- (h) *This subsection operates retroactively to January 1, 2021.*
- (7) *If an impact fee is increased, the holder of any impact fee credits, whether such credits are granted under s. 163.3180, s. 380.06, or otherwise, which were in existence before the increase, is entitled to the full benefit of the intensity or density prepaid by the credit balance as of the date it was first established.*
- (8) *A local government, school district, or special district must submit with its annual financial report required under s. 218.32 or its financial audit report required under s. 218.39 a separate affidavit signed by its chief financial officer or, if there is no chief financial officer, its executive officer attesting, to the best of his or her knowledge, that all impact fees were collected and expended by the local government, school district, or special district, or were collected and expended on its behalf, in full compliance with the spending period provision in the local ordinance or resolution, and that funds expended from each impact fee account were used only to acquire, construct, or improve specific infrastructure needs.*
- (9) *In any action challenging an impact fee or the government's failure to provide required dollar-for-dollar credits for the payment of impact fees as provided in s. 163.3180(6)(h)2.b., the government has the burden of proving by a preponderance of the evidence that the imposition or amount of the fee or credit meets the requirements of state legal precedent and this section. The court may not use a deferential standard for the benefit of the government.*
- (10) *Impact fee credits are assignable and transferable at any time after establishment from one development or parcel to any other that is within the same impact fee zone or impact fee district*



*or that is within an adjoining impact fee zone or impact fee district within the same local government jurisdiction and which receives benefits from the improvement or contribution that generated the credits. This subsection applies to all impact fee credits regardless of whether the credits were established before or after the date the act become law.*

- (11) A county, municipality, or special district may provide an exception or waiver for an impact fee for the development or construction of housing that is affordable, as defined in s. 420.9071. If a county, municipality, or special district provides such an exception or waiver, it is not required to use any revenues to offset the impact.*
- (12) This section does not apply to water and sewer connection fees.*
- (13) In addition to the items that must be reported in the annual financial reports under s. 218.32, a local government, school district county, municipality, or special district must report all of the following information data on all impact fees charged:*
  - (a) The specific purpose of the impact fee, including the specific infrastructure needs to be met, including, but not limited to, transportation, parks, water, sewer, and schools.*
  - (b) The impact fee schedule policy describing the method of calculating impact fees, such as flat fees, tiered scales based on number of bedrooms, or tiered scales based on square footage.*
  - (c) The amount assessed for each purpose and for each type of dwelling.*
  - (d) The total amount of impact fees charged by type of dwelling.*
- (e) Each exception and waiver provided for construction or development of housing that is affordable.”*

The purpose of preparing this Technical Report is to demonstrate that the City’s mobility fee is proportional and reasonably connected to, or has a rational nexus with, both the need for new multimodal transportation projects and the mobility benefits provided to those who pay the fee, otherwise known as the “dual rational nexus test” and “rough proportionality test”, as required by Florida Statute Section 163.31801(4)(f)(g)(h). The “dual rational nexus test” requires a local government and this Technical Report to demonstrate that there is a reasonable connection, or rational nexus, between:

***The “Need” for additional (new) capital facilities (improvements and projects) to accommodate the increase in demand from new development (growth), and***

***The “Benefit” that the new development receives from the payment and expenditure of fees to construct the new capital improvements.***



In addition to the “dual rational nexus test”, the U.S. Supreme Court in *Dolan v. Tigard* also established a “rough proportionality test” to address the relationship between the amount of a fee imposed on a new development and the impact of the new development. The “rough proportionality test” requires that there be a reasonable relationship between the impact fee and the impact of new development based upon the applicable unit of measure for residential and non-residential uses and that the variables used to calculate a fee are reasonably assignable and attributable to the impact of each new development. The first time the Courts recognized the authority of a municipality to impose “impact fees” in Florida occurred in 1975 in the case of *City of Dunedin v. Contractors and Builders Association of Pinellas County*, 312 So.2d 763 (2d DCA. Fla., 1975), where the court held: “that the so-called impact fee did not constitute taxes but was a charge using the utility services under Ch. 180, F. S.”

The Court set forth the following criteria to validate the establishment of an impact fee:

*“...where the growth patterns are such that an existing water or sewer system will have to be expanded in the near future, a municipality may properly charge for the privilege of connecting to the system a fee which is in excess of the physical cost of connection, if this fee does not exceed a proportionate part of the amount reasonably necessary to finance the expansion and is earmarked for that purpose.”* 312 So.2d 763, 766, (1975).

The case was appealed to the Florida Supreme Court and a decision rendered in the case of *Contractors and Builders Association of Pinellas County v. City of Dunedin* 329 So.2d 314 (Fla. 1976), in which the Second District Court's decision was reversed. The Court held that “impact fees” did not constitute a tax; that they were user charges analogous to fees collected by privately owned utilities for services rendered. However, the Court reversed the decision, based on the finding that the City did not create a separate fund where impact fees collected would be deposited and earmarked for the specific purpose for which they were collected, finding:

*“The failure to include necessary restrictions on the use of the fund is bound to result in confusion, at best. City personnel may come and go before the fund is exhausted, yet there is nothing in writing to guide their use of these moneys, although certain uses, even within the water and sewer systems, would undercut the legal basis for the fund's existence. There is no justification for such casual handling of public moneys, and we therefore hold that the ordinance is defective for failure to spell out necessary restrictions on the use of fees it authorizes to be collected. Nothing we decide, however prevents Dunedin from adopting another sewer connection charge ordinance, incorporating appropriate restrictions on use of the revenues it produces. Dunedin is at liberty, moreover, to adopt an ordinance restricting the use of moneys already collected. We pretermitt any discussion of refunds for that reason.”* 329 So.2d 314 321, 322 (Fla. 1976)



The case tied impact fees directly to growth and recognized the authority of a local government to impose fees to provide capacity to accommodate new growth and base the fee on a proportionate share of the cost of the needed capacity. The ruling also established the need for local government to create a separate account to deposit impact fee collections to help ensure those funds are expended on infrastructure capacity.

The Utah Supreme Court had ruled on several cases related to the imposition of impact fees by local governments before hearing *Banberry v. South Jordan*. In the case, the Court held that: “the fair contribution of the fee-paying party should not exceed the expense thereof met by others. To comply with this standard a municipal fee related to service like water and sewer must not require newly developed properties to bear more than their equitable share of the capital costs in relation to the benefits conferred” (*Banberry Development Corporation v. South Jordan City*, 631 P. 2d 899 (Utah 1981)). To provide further guidance for the imposition of impact fees, the court articulated seven factors which must be considered (*Banberry Development Corporation v. South Jordan City*, 631 P. 2d 904 (Utah 1981)):

- “(1) the cost of existing capital facilities;*
- (2) the manner of financing existing capital facilities (such as user charges, special assessments, bonded indebtedness, general taxes or federal grants);*
- (3) the relative extent to which the newly developed properties and the other properties in the municipality have already contributed to the cost of existing capital facilities (by such means as user charges, special assessments, or payment from the proceeds of general taxes);*
- (4) the relative extent to which the newly developed properties in the municipality will contribute to the cost of existing capital facilities in the future;*
- (5) the extent to which the newly developed properties are entitled to a credit because the municipality is requiring their developers or owners (by contractual arrangement or otherwise) to provide common facilities (inside or outside the proposed development) that have been provided by the municipality and financed through general taxation or other means (apart from user fees) in other parts of the municipality;*
- (6) extraordinary costs, if any, in servicing the newly developed properties; and*
- (7) the time-price differential inherent in fair comparisons of amounts paid at different times.”*



The Court rulings in Florida, Utah and elsewhere in the U.S. during the 1970's and early 1980's led to the first use of what ultimately became known as the "dual rational nexus test" in *Hollywood, Inc. v. Broward County*; which involved a Broward County ordinance that required a developer to dedicated land or pay a fee for the County park system. The Fourth District Court of Appeal found to establish a reasonable requirement for dedication of land or payment of an impact fee that:

*"... the local government must demonstrate a reasonable connection, or rational nexus between the need for additional capital facilities and the growth of the population generated by the subdivision. In addition, the government must show a reasonable connection, or rational nexus, between the expenditures of the funds collected and the benefits accruing to the subdivision. In order to satisfy this latter requirement, the ordinance must specifically earmark the funds collected for the use in acquiring capital facilities to benefit new residents." (Hollywood, Inc. v. Broward County, 431 So. 2d 606 (Fla. 4th DCA), rev. denied, 440 So. 2d 352 (Fla. 1983).*

In 1987, the first of two major cases were heard before the Supreme Court that have come to define what is now commonly referred to as the "dual rational nexus test". The first case was *Nollan v. California Coastal Commission* which involved the Commission requiring the Nollan family to dedicate a public access easement to the beach in exchange for permitting the replacement of a bungalow with a larger home which the Commission held would block the public's view of the beach. Justice Scalia delivered the decision of the Court: "The lack of nexus between the condition and the original purpose of the building restriction converts that purpose to something other than what it was...Unless the permit condition serves the same governmental purpose as the development ban, the building restriction is not a valid regulation of land use but an out-and-out plan of extortion (*Nollan v. California Coastal Commission*, 483 U. S. 825 (1987)". The Court found that there must be an essential nexus between an exaction and the government's legitimate interest being advanced by that exaction (*Nollan v. California Coastal Commission*, 483 U. S. 836, 837 (1987).

The second case, *Dolan v. Tigard*, heard by the Supreme Court in 1994 solidified the elements of the "dual rational nexus test". The Petitioner Dolan, owner and operator of a Plumbing & Electrical Supply store in the City of Tigard, Oregon, applied for a permit to expand the store and pave the parking lot of her store. The City Planning Commission granted conditional approval, dependent on the property owner dedicating land to a public greenway along an adjacent creek, and developing a pedestrian and bicycle pathway to relieve traffic congestion. The decision was affirmed by the Oregon State Land Use Board of Appeal and the Oregon Supreme Court. The U.S. Supreme Court overturned the ruling of the Oregon Supreme Court and held:



*"Under the well-settled doctrine of "unconstitutional conditions," the government may not require a person to give up a constitutional right in exchange for a discretionary benefit conferred by the government where the property sought has little or no relationship to the benefit. In evaluating Dolan's claim, it must be determined whether an "essential nexus" exists between a legitimate state interest and the permit condition. Nollan v. California Coastal Commission, 483 U. S. 825, 837. If one does, then it must be decided whether the degree of the exactions demanded by the permit conditions bears the required relationship to the projected impact of the proposed development." Dolan v. City of Tigard, 512 U.S. 383, 386 (1994)*

The U.S. Supreme Court in addition to upholding the "essential nexus" requirement from Nollan also introduced the "rough proportionality" test and held that:

*"In deciding the second question-whether the city's findings are constitutionally sufficient to justify the conditions imposed on Dolan's permit-the necessary connection required by the Fifth Amendment is "rough proportionality." No precise mathematical calculation is required, but the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the proposed development's impact. This is essentially the "reasonable relationship" test adopted by the majority of the state courts. Dolan v. City of Tigard, 512 U.S. 388, 391 (1994)"*

An often-overlooked component of Dolan v. City of Tigard is the recognition that while multimodal facilities may off-set traffic congestion there is a need to demonstrate or quantify how the dedication of a pedestrian / bicycle pathway would offset the traffic demand generated. per the following excerpt from the opinion of the Court delivered by Chief Justice Rehnquist:

*"The city made the following specific findings relevant to the pedestrian/bicycle pathway: "In addition, the proposed expanded use of this site is anticipated to generate additional vehicular traffic thereby increasing congestion on nearby collector and arterial streets. Creation of a convenient, safe pedestrian/bicycle pathway system as an alternative means of transportation could offset some of the traffic demand on these nearby streets and lessen the increase in traffic congestion." We think a term such as "rough proportionality" best encapsulates what we hold to be the requirement of the Fifth Amendment. No precise mathematical calculation is required, but the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development.*

*With respect to the pedestrian/bicycle pathway, we have no doubt that the city was correct in finding that the larger retail sales facility proposed by petitioner will increase traffic on the streets of the Central Business District. The city estimates that the proposed development would generate roughly 435 additional trips per day. Dedications for streets, sidewalks, and other public ways are generally reasonable exactions to avoid excessive congestion from a proposed property use. But on the record before us, the city has not met its burden of demonstrating that the additional number of vehicle and bicycle trips generated by the petitioner's development reasonably relate to the city's requirement for a dedication of the pedestrian/bicycle pathway easement. The city simply found that the creation of the pathway "could offset some of the traffic demand . . . and lessen the increase in traffic congestion."*



*“As Justice Peterson of the Supreme Court of Oregon explained in his dissenting opinion, however, “[t]he findings of fact that the bicycle pathway system could offset some of the traffic demand’ is a far cry from a finding that the bicycle pathway system will, or is likely to, offset some of the traffic demand.” 317 Ore., at 127, 854 P. 2d, at 447 (emphasis in original). No precise mathematical calculation is required, but the city must make some effort to quantify its findings in support of the dedication for the pedestrian/bicycle pathway beyond the conclusory statement that it could offset some of the traffic demand generated.” Dolan v. City of Tigard, 512 U.S. 687 (1994).*

The development of a mobility plan identifies the potential for multimodal projects to provide the person miles of capacity to meet future person miles of travel. The calculation of a mobility fee based on person travel demand documents and quantifies the connection between the provision of multimodal person capacity and the person travel demand generated by new development travel and meets the dual rational nexus and rough proportionality test.

The U.S. Supreme Court recently affirmed, through *Koontz vs. St. Johns River Water Management District*, that the “dual rational nexus” test equally applies to monetary exactions in the same manner as a governmental regulation requiring the dedication of land. Justice Alito described:

*“Our decisions in Nollan v. California Coastal Commission, 483 U. S. 825 (1987), and Dolan v. City of Tigard, 512 U. S. 374 (1994), provide important protection against the misuse of the power of land-use regulation. In those cases, we held that a unit of government may not condition the approval of a land-use permit on the owner’s relinquishment of a portion of his property unless there is a “nexus” and “rough proportionality” between the government’s demand and the effects of the proposed land use. In this case, the St. Johns River Water Management District (District) believes that it circumvented Nollan and Dolan because of the way in which it structured its handling of a permit application submitted by Coy Koontz, Sr., whose estate is represented in this Court by Coy Koontz, Jr. The District did not approve his application on the condition that he surrender an interest in his land. Instead, the District, after suggesting that he could obtain approval by signing over such an interest, denied his application because he refused to yield.” Koontz v. St. Johns River Water Management District 1333 S. Ct. 2586 (2013).*

*“That carving out a different rule for monetary exactions would make no sense. Monetary exactions—particularly, fees imposed “in lieu” of real property dedications—are “commonplace” and are “functionally equivalent to other types of land use exactions.” To subject monetary exactions to lesser, or no, protection would make it “very easy for land-use permitting officials to evade the limitations of Nollan and Dolan.” Furthermore, such a rule would effectively render Nollan and Dolan dead letters “because the government need only provide a permit applicant with one alternative that satisfies the nexus and rough proportionality standard, a permitting authority wishing to exact an easement could simply give the owner a choice of either surrendering an easement or making a payment equal to the easement’s value.” Koontz v. St. Johns River Water Management District 1333 S. Ct. 2599 (2013).*



## DEVELOPING THE ST. AUGUSTINE MOBILITY PLAN & FEE

There were multiple steps that went into development of the 2040 Mobility Plan and a mobility fee for the City. The first overall step was amending the Comprehensive Plan during the Evaluation and Appraisal Report (EAR) process to establish legislative intent for the City to develop a mobility fee based on a plan of multimodal projects. Several of the goals, objectives, and policies adopted as part of the Comprehensive Plan amendment are provided in the preceding section. The following is an overview of the steps taken to develop the City's Mobility Plan and Mobility Fee (**Figure 1**).

**Figure 1. Developing a Mobility Plan & Mobility Fee**





## TRANSPORTATION & MOBILITY ELEMENT

In 2020, the City updated the Transportation and Mobility Element of the Comprehensive Plan to establish legislative intent to develop a mobility plan and mobility fee. The following are the goals, objectives and policies integrating land use, transportation mobility, parking, fees, and implementation of the City's Mobility Plan and Mobility Fee (**Figure 2**).

**Figure 2. Integrating Land Use, Mobility, Parking & Fees**



### OVERALL GOAL

**"THE CITY WILL ENCOURAGE ACCESSIBLE, ENERGY EFFICIENT, SUSTAINABLE AND ECONOMICALLY VIABLE TRANSPORTATION OPTIONS THAT MEET THE NEEDS OF RESIDENTS, EMPLOYERS, EMPLOYEES AND VISITORS THROUGH A VARIETY OF INNOVATIVE METHODS THAT ARE SENSITIVE TO THE ENVIRONMENTAL, HISTORICAL, AND CULTURAL RESOURCES OF THE CITY OF ST. AUGUSTINE."**

### TME GOAL 1 TRANSPORTATION

**"To maintain a coordinated multimodal transportation system which provides for the safe, efficient, and economical movement of**

**people, goods, and services, which is consistent with the Future Land Use Plan, recognizes the impact resulting from sea level rise and higher, more intense rainfall, conserves energy, and protects the City's natural, cultural, and historical resources."**

#### TME Objective 1.1

**"The City shall provide a safe, convenient and efficient motorized and nonmotorized transportation system."**

#### TME Policy 1.1.4

**"Continue to implement provisions of the adopted Mobility Plan related to traffic circulation (one-way and two-way streets), satellite parking areas, public transportation, and on-street parking."**

### TME GOAL 2 MOBILITY

**"Establish a coordinated multimodal transportation system that provides mobility for pedestrians, bicyclists, circulator and transit users, motorized vehicle users, rail and trail users, and is sensitive to the City of St. Augustine's natural, cultural, and historical resources."**



**TME Objective 2.1**

“The City shall provide a safe, convenient, connected, visible, and efficient multimodal transportation system. The measurable targets for this objective are based upon the establishment of multimodal quality of service standards for people walking, bicycling, riding transit, and driving.”

**TME Policy 2.1.2**

“The quality-of-service standards shall be used for multimodal transportation planning to identify needed improvements for future updates of the Mobility Plan.”

**TME Policy 2.1.3**

“The quality-of-service standards shall also be used to develop multimodal capacities for projects included in the Mobility Plan that will serve as the basis for development of a Mobility Fee to be paid by new development and redevelopment with an increase in person travel demand.”

**TME Policy 2.1.4**

“The established quality of service standards maybe used for Complete Street Design and to establish requirements for new development and redevelopment to achieve for multimodal facilities internal to the project and along external on-site property boundaries.”

**TME GOAL 3 MOBILITY PLANNING**

**“To enhance the quality of life for City residents and reduce congestion by (1) making it safer and more convenient for people to walk and bicycle, (2) creating a park once environment within the multimodal district for longer duration visits, and (3) developing innovative parking management strategies that improve access to local businesses and reduce the impact of non-city resident traffic on residential streets.”**

**TME Objective 3.1**

“To develop and implement a 2040 Mobility Plan focused on the movement of people, the provision of multiple multimodal transportation options to move about the community, the pursuit of a park once environment for travel within the City’s multimodal district for longer duration visits, and the development of a Mobility Fee, based upon the projects identified in the Mobility Plan, that allows for new development and redevelopment to equitably mitigate its impact to the multimodal transportation system.”

**TME Policy 3.1.1**

“The City will promote an interconnected, multimodal transportation system that transitions from a system focused on quickly moving motor vehicles toward a system that emphasizes the movement of people of all ages and abilities, whether those people choose to walk, bicycle, ride transit, drive a motor vehicle or use a new transportation mobility technology.”



**TME Policy 3.1.2**

“The Mobility Plan shall identify multimodal projects that include improvements, services, and programs for people walking, bicycling, riding transit, driving motor vehicles and utilizing new mobility technologies. The projects identified in the Mobility Plan shall be based upon existing demand and projected increases in personal travel demand by 2040, the mobility plan horizon year, from new development, redevelopment, tourism and the growing population in northeast Florida.”

**TME Policy 3.1.3**

“Mobility Plan projects within the City’s multimodal district shall prioritize walking and bicycling and the provision of safe, visible, connected and convenient ADA compliant facilities to encourage people walking and bicycling.”

**TME Policy 3.1.4**

“The Mobility Plan shall promote a park once environment with parking garages located outside of the multimodal district for longer duration visits generally exceeding three or more hours. Surface parking lots maybe initially provided with the intent of constructing parking garages. The Mobility Plan shall include transit circulator routes and identify water taxi docks, for public and/or private water taxi service, that connect the parking garages to destinations within the multimodal district. As more parking spaces are located in parking garages along the periphery of the multimodal district and frequent multimodal transportation options are provided, longer duration visits may include visits of two or more hours in length.”

**TME Policy 3.1.5**

“The City shall evaluate opportunities to partner with private transit companies to provide services and shall also consider water taxi services, and new transit technology including autonomous microtransit vehicles and aerial tramways. The City shall maintain and expand programs to license transit providers and water taxi services, along with paratransit services. The City shall continue to work with the Sunshine Bus Company and other transit providers to determine service routes that can provide enhanced mobility.”

**TME Policy 3.1.6**

“The addition of motor vehicle capacity, turn lanes, or upgrades to enhance the flow of vehicles within the multimodal district shall be discouraged, except for access improvements from US 1 to the Historic Downtown Parking Garage. Mobility Plan projects for motor vehicles shall be focused on the diversion of cut-through and regional traffic away from the multimodal district and onto US 1, SR 207, SR 312, and SR 16, with an emphasis on further diversion of trips away from US 1 and SR 207 once the SR 313 extension is completed.”

**TME Policy 3.1.8**

“The Mobility Plan projects may include, but are not limited to, sidewalks, paths, trails, bike lanes, protected bike lanes, buffered bike lanes, bicycle boulevards, bicycle racks, shared streets, speed reduction programs, shared-use multimodal lanes, flexible lanes, dedicated transit lanes, high-



occupancy vehicle lanes, mobility hubs, pavement markings, traffic control devices, enhanced crosswalks, advanced warning systems, streetscape, hardscape, landscape, turn lanes, intersection improvements, safety improvements, roundabouts, bridges, transit stops, shelters, stations and pull-out bays, transit vehicles, and new motor vehicle travel lanes.”

**TME Policy 3.1.9**

“The Mobility Plan projects may include repurposing existing right-of-way from motor vehicle travel lanes to lanes for shared streets, dedicated transit facilities, high-occupancy lanes, protected bicycle facilities, flexible 15 MPH lanes, shared-use multimodal lanes, expansion of sidewalks, trails and paths, and the integration of green infrastructure.”

**TME Policy 3.1.21**

“A Mobility Fee is one source of revenue to fund the projects identified in the Mobility Plan. Gas, property and sales tax, CRA, County, State and Federal grants and funds, special assessments, higher education student fees, user fees, private party contributions, and parking revenues are all additional sources of revenue that are available to fund projects identified in the Mobility Plan. The City should consider opportunities to combine revenue sources, to the extent permissible, to advance the Mobility Plan, Complete Street, safety and parking management multimodal projects.”

**TME Policy 3.1.22**

“The Mobility Plan projects shall serve as the basis for development of a mobility fee. The Mobility Fee shall be a one-time assessment on new development or redevelopment that results in an increase in person travel demand. The Mobility Fee shall be required to meet the dual rational nexus test and shall be reasonably attributable to the person travel demand of new development, infill and redevelopment. Multimodal capacities based upon quality of service standards shall be established to ensure fees are reasonably assignable to the impacts of new development or redevelopment.”

**TME Policy 3.1.23**

“The Mobility Fee, consistent with Florida Statute, is intended to replace transportation concurrency and proportionate fair-share contributions and would be provided in place of a road impact fee.”

**TME Policy 3.1.24**

“The Mobility Fee may include provisions to encourage and incentivize new development, infill and redevelopment within the multimodal district and targeted areas of the City. The Mobility Fee may also include provisions to encourage affordable, workforce housing, mixed-use, multimodal supportive development and desired land uses that increase employment and attract economic development consistent with Florida Statutes.”

**TME Policy 3.1.25**

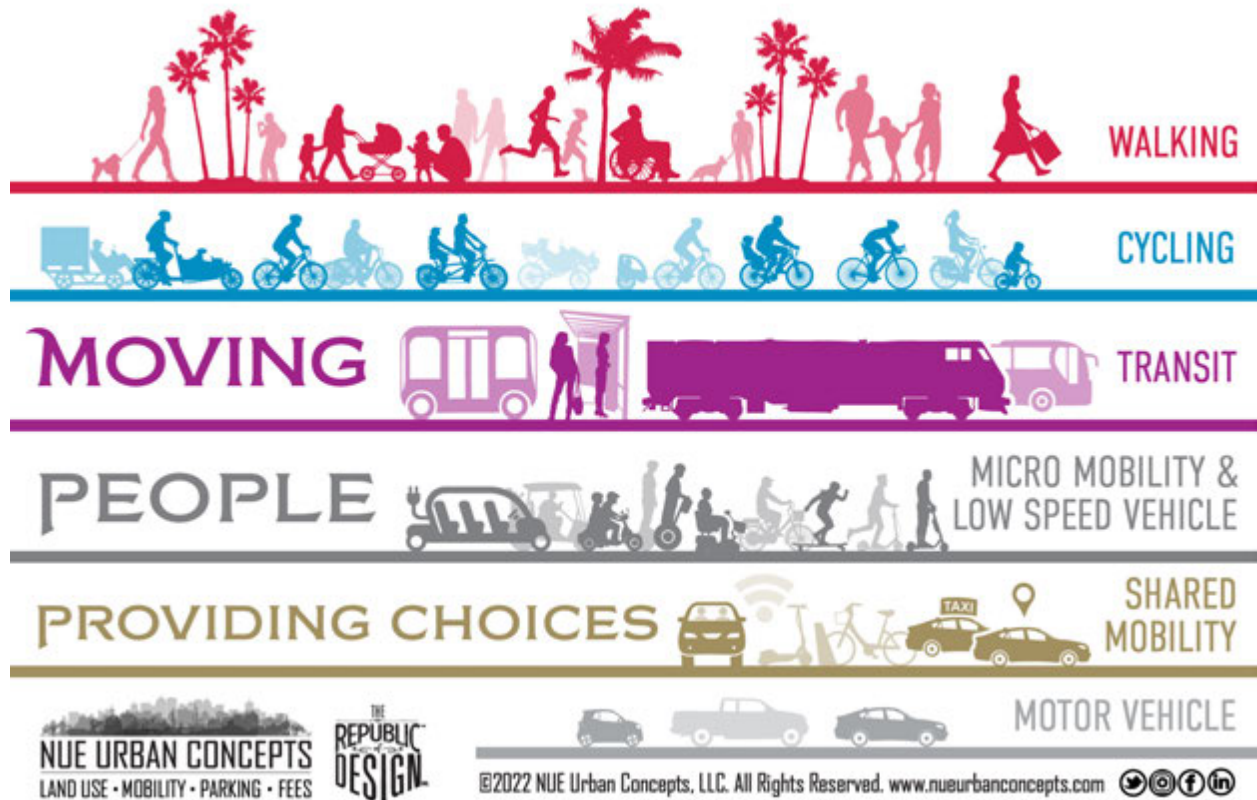
“The Mobility Plan and Fee shall be re-evaluated and updated every five years. The Mobility Fee shall be indexed and adjusted for inflation on an annual basis.”



## MOBILITY PLAN

The City of St. Augustine's Mobility Plan implements the goals, objectives and policies set forth in the Comprehensive Plan and prioritizes the multimodal projects needed to accommodate future travel demand and enhance mobility within the community in a manner that is coordinated with the Future Land Use Element in the City's Comprehensive Plan. The 2040 Mobility Plan, adopted in 2020 through amendments to the City's Comprehensive Plan, promotes the continued transition from a transportation system focused on moving cars towards a multimodal system focused on providing people with enhanced mobility choices to walk, bike, ride a trolley, or use new forms of transportation to move about the City (**Figure 3**).

**Figure 3. Moving People, Providing Choices**



The types of multimodal projects included in the Mobility Plan are intended to achieve the goals, objectives and policies set forth in the Comprehensive Plan (**Figure 4**). The multimodal projects identified in the Mobility Plan were established based on the multimodal elements necessary to transition from a transportation system focused on moving cars, towards a safe, comfortable, and convenient multimodal system focused on moving people (**Figure 5**).



**Figure 4. Types of Projects in the Mobility Plan**

## ST. AUGUSTINE MOBILITY PROJECTS



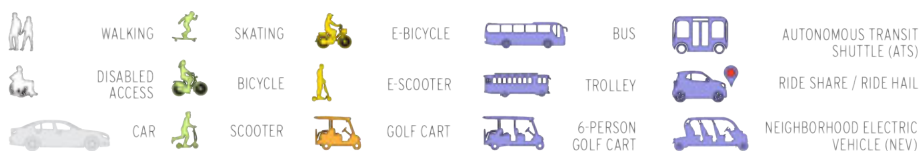
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THE  
**REPUBLIC**  
DESIGN

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**LEGEND:**





**Figure 5. Multimodal Elements**

## ST. AUGUSTINE MULTIMODAL ELEMENTS

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**MOBILITY:** The ability to move people from place (origin) to place (destination) by multiple modes (walk, bike, transit, vehicle) of travel in a timely (speed) and efficient manner. The lack of sidewalks, paths, trails, bike lanes, and curb access ramps are often impediments to people choosing to walk or bike from home to work and other daily activities.



**EQUITY:** The ability to access relevant activities such as employment, education, entertainment, health care, personal services, recreation, and retail opportunities by people of all ages, abilities, race, and socioeconomic strata without undue and unjust burden. Equitable mobility provides transportation justice for not only underserved and/or disadvantaged communities but also for vulnerable users. People have a fundamental right to move around easily, safely, and conveniently.



**ACCESSIBILITY:** The ease at which people reach, enter, and use modes of travel (walk / bike / transit / vehicle) at the origin and destination of their trip. Transit systems are frequently burdened with addressing the issue of first and last mile access. Providing Americans with Disabilities Act (ADA)-compliant curb access ramps at origins, destinations, intersections, driveways, and mid-block crossings is imperative to removing impediments for vulnerable users such as the disabled, children, the elderly, and people riding bicycles and micromobility devices.



**CONNECTIVITY:** The number of route options people have available to them and their directness and/or distance. Gridded street networks provide a high level of connectivity, whereas dead-end cul-de-sacs do not. Innovative approaches to enhance connectivity, such as Low Speed and Shared Streets, along with using paths and trails for non-vehicular connections, improve mobility and accessibility for people walking, bicycling, riding micromobility devices, and accessing transit.



**VISIBILITY:** The frequency at which those driving a car see people walking, bicycling, riding various micromobility devices, and accessing transit. More people walking and biking = greater awareness and more people walking and biking = safer conditions (i.e. safety in numbers). Green bike lanes, pavers at crosswalks, and flashing signals are all design elements used to increase visibility of people walking and bicycling.



**CONTINUITY:** The uninterrupted consistency of sidewalks, paths, trails, and bike lanes in width and condition with logical beginning and endpoints that are without gaps and without sudden and abrupt termination. Roads do not suddenly terminate without warning, change number of lanes, or randomly change width without proper transitions – neither should sidewalks, paths, trails, or bike lanes.



**SAFETY:** The combination of behavioral and physical design elements of the built environment can make mobility comfortable and pleasant for all ages and abilities. The elements that provide safety include slower speeds, physical separation, enhanced visibility crossings, and designations for different mobility modes. Enhanced safety features encourage behavioral changes that make safety everyone's responsibility.



**COMFORT:** The sum of all the mobility elements plus the overall quality of the built environment provided for the various mobility modes that allow for comfortable travel, trip satisfaction, travel choice, and time-cost choice. The perception of comfort shows that the availability of a car doesn't automatically make it a first mode choice and the most obvious or direct route may also not be the most comfortable. Improving conditions can remove impediments, increase trip satisfaction and usefulness, and incline travellers to use non-vehicular modes.

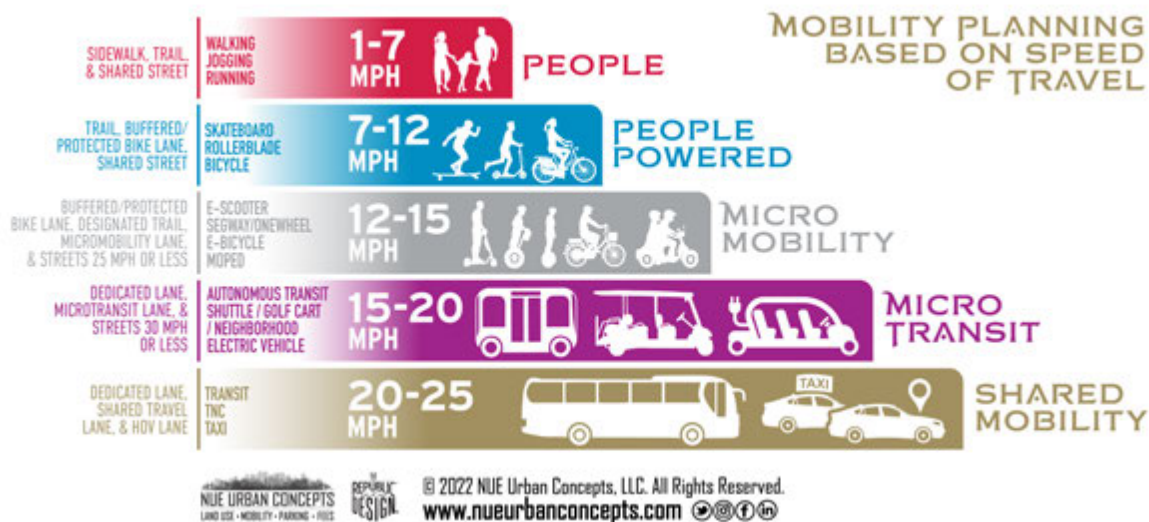


**SOCIAL VALUE:** The people-to-people connections one experiences in a shared space environment, whether biking, walking, or riding transit. The social value of these interactions increases both individual happiness and societal happiness through active engagement with the community that overall increases the quality of life and fosters independence, especially for children and the elderly.



To facilitate the transition from a transportation system focused on moving cars towards a multimodal system focused on the movement of people, it's important to understand that the speed of travel varies greatly whether a person is walking, bicycling, scooting, riding transit, or driving a car. The speed of multimodal travel generally falls within five tiers, each of which requires appropriate multimodal projects to accommodate the desired speed of travel (**Figure 6**). Future updates of the Mobility Plan may involve additional multimodal projects to accommodate desired modes of travel. Specifically, as micromobility (e.g., electric bikes and electric scooters), microtransit (e.g., golf carts, neighborhood electric vehicles, and autonomous transit shuttles), and shared mobility (e.g., transit, ride-hail, and car-share) devices, services, and programs expand, and new technology options become available, there will be a need to reimagine and repurpose road and street rights-of-way and travel lanes to accommodate the different speeds of travel for these multimodal modes of personal mobility.

**Figure 6. Speed of Travel**



Florida Statute 163.3180 (5)(f)(5) identifies the establishment of multimodal quality of service (QOS) standards as part of a mobility plan and fee to plan for multimodal travel, as well as providing a distinct alternative to transportation concurrency. In 2020, the City adopted policies in its Comprehensive Plan, to enhance safety, convenience, connectivity, and moving towards safer streets for all users. The 2020 Comprehensive Plan amendment established multimodal QOS standards for people walking, bicycling, riding transit, and driving. To make a clean break from transportation concurrency, the 2020 amendment to the Comprehensive Plan replaced roadway LOS standards, based on the capacity of cars, with Street QOS standards, based on the posted speed limit, to move towards the goal of safer streets for all users of the multimodal transportation system.



Street QOS standards are intended to enhance mobility for all modes of travel and move towards safer streets for all by prioritizing slower speeds for cars. Studies have shown there is a direct correlation between the speed of car travel and the severity of crashes. As speeds increase, so does the probability that a crash involving people walking, bicycling, or driving will result in one or more fatalities. The adopted street QOS standards are the inverse of roadway LOS standards in that as speed limits go down, street QOS goes up and allow the City the flexibility to design streets safer for all users. Whereas, for roadway LOS, as speed limits go down, road LOS also goes down, requiring the City to look at ways to add road capacity.

Establishing street QOS standards based on posted speed limits more accurately reflects the intended purpose of a street or road and the desired level of people walking and bicycling, along with access to adjacent land uses. The lower the speed, the greater the accessibility to adjacent land uses and the safer it is to walk or bicycle. The higher the speed limit, access to adjacent land uses becomes more restrictive, with a greater emphasis on the movement of vehicles. However, just because a lower speed limit is posted, it does not mean cars will slow down, unless there are actual changes to the street right-of-way that will result in people driving slower and more people feeling comfortable to bicycle and walk.

Speed of travel is one of the most important factors in determining the design of a street. Slower speed streets create an environment that is safer and more comfortable to walk, bicycle, or use a new form of mobility technology; while also making all users of the transportation system more visible to people driving cars: achieving three (3) of the established multimodal elements (**Figure 5**). Street QOS standards that promote slower speeds provide planners and engineers with greater flexibility to implement innovative street designs, such as low speed and complete streets, narrower travel lanes, and locating buildings and trees closer to travel lanes.

To ensure streets are designed to make it safer for all, design speeds are intended to be based on posted speed limits. This approach differs greatly from the 85% rule, traditionally used to design road and streets, which states that speed limits should be set at the speeds of which 85% of drivers travel at, and designs should accommodate this speed. The traditional approach prioritizes driving, the City's QOS standards prioritizes slower speeds where more people walk and bike and recognizes higher speeds are more appropriate on corridors carrying higher volumes of motor vehicles.

Street QOS standards will be phased in over time as part of: (1) designing new multimodal projects; (2) reimagining existing right-of-way to emphasize the safe movement of people versus the quick movement of cars, or (3) allowing for greater levels of neighborhood traffic calming that improve safety and potentially reduced cut through traffic. Street QOS standards are intended to be flexible based on applicable locations and type of street (**Figure 7**).





**FIGURE 7. STREET QUALITY OF SERVICE (QOS) STANDARDS**

**MOVING TOWARDS SAFER STREETS FOR ALL** CITY OF ST. AUGUSTINE STREET QUALITY OF SERVICE STANDARDS

STREET QUALITY OF SERVICE (QOS) STANDARDS	POSTED SPEED LIMIT	APPLICABLE LOCATIONS
Quality of Service (QOS) A*	SPEED LIMIT 15	SHARED STREETS / LOCAL & RESIDENTIAL STREETS IN HISTORIC DISTRICTS
Quality of Service (QOS) B	SPEED LIMIT 20	ARTERIAL, COLLECTOR, LOCAL & RESIDENTIAL STREETS IN HISTORIC DISTRICTS / MINOR COLLECTOR, LOCAL & RESIDENTIAL STREETS OUTSIDE HISTORIC DISTRICTS
Quality of Service (QOS) C	SPEED LIMIT 25	ARTERIAL STREETS IN HISTORIC DISTRICTS / COLLECTORS, LOCAL & RESIDENTIAL STREETS OUTSIDE HISTORIC DISTRICTS
Quality of Service (QOS) D	SPEED LIMIT 30	MAJOR COLLECTORS & MINOR ARTERIALS OUTSIDE HISTORIC DISTRICTS
Quality of Service (QOS) E**	SPEED LIMIT 35 +	PRINCIPAL ARTERIALS OUTSIDE HISTORIC DISTRICTS

\* POSTED SPEED LIMIT IS MAXIMUM. LOWER SPEEDS WOULD ALSO BE QOS A  
\*\* POSTED SPEED LIMIT IS MINIMUM. HIGHER SPEEDS WOULD ALSO BE QOS E

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For local streets and shared streets which emphasize walking and bicycling and provide direct access to homes and businesses, quality of service (QOS) standards will be set at either QOS of “A”, which would be equivalent to a posted speed limit of 15 MPH or less, or a QOS of “B”, which would be equivalent to a posted speed limit of 20 MPH. Collector streets, which connect local and shared streets to arterial roads, will be set at either QOS of “B”, which would be equivalent to a posted speed limit of 20 MPH, or a QOS of “C”, which would be equivalent to a speed limit of 25 MPH.

Arterial roads, which are focused on moving higher volumes of traffic and consist of roads maintained and owned by the Florida Department of Transportation, will have either a QOS of “C”, “D” or “E”. Arterial roads within the historic downtown district would have a QOS standard of “C”. Arterial roads on the periphery of the multimodal district would have a QOS of “C” or a QOS standard of “D”, which would be equivalent to a posted speed limit of 30 MPH. Arterials outside of the multimodal district, which are intended to carry higher volumes of traffic and serve more through movements, would have either a QOS of “D” or a QOS standard of “E”, which would be equivalent to a posted speed limit of 35 MPH or greater.

Multimodal QOS standards can be used for performance measures, mobility planning, design standards, and prioritizing multimodal and are used to establish multimodal capacities for use in the mobility fee calculations. These standards combine QOS and LOS based on: (1) the width of the facility (i.e., bike lane, path, sidewalk); (2) the type of physical separation between multimodal




facilities and travel lanes for cars, SUVs, trucks, and other motor vehicles; and (3) the posted speed limit. The following multimodal QOS standards for people bicycling and walking on sidewalks, paths and trails vary based on the width of the facility, the type of physical separation from motor vehicle travel lanes (e.g., street trees, on-street parking) and posted speed limit (**Figure 8**). For example, a five (5) foot sidewalk adjacent to travel lanes would result in a QOS “E”, whereas a twelve (12) foot wide trail separated from travel lanes by a landscaped buffer would be a QOS “A”. The higher the QOS, the higher the multimodal capacity and likelihood that people would utilize the facility (Transportation and Mobility Element Policy 2.1.6).

**FIGURE 8. BICYCLING & WALKING QUALITY OF SERVICE (QOS) STANDARDS**

**MOVING TOWARDS SAFER STREETS FOR ALL**


CITY OF ST. AUGUSTINE  
MULTIMODAL QUALITY OF SERVICE STANDARDS



MULTIMODAL QUALITY OF SERVICE STANDARDS FOR BICYCLING AND WALKING

FACILITY TYPE	LIMITED SEPARATION	STREET TREES	ON-STREET PARKING	LANDSCAPE BUFFER
TRAIL 12' +	B	A	A	A
PATH 10'	C	B	B	B
PATH 8'	D	C	C	C
SIDEWALK 7' OR LESS	E	D	D	D

The presence of two or more physical separation features, such as on-street parking and street trees would result in an increase in one letter grade. For example, a 10' wide path with street trees and on-street parking would achieve a quality of service of "K", a 5' wide sidewalk with street trees and a landscape buffer would achieve a quality of service of "C".

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The City adopted the following multimodal QOS standards for bike lanes that accommodate travel demand for people skating, riding a bicycle, scooter, skateboard, or micromobility device based on the width of the facility and either the level of physical separation from motor vehicle travel lanes, the visibility of the facility or the posted speed limit (Transportation and Mobility Element Policy 2.1.7) (**Figure 9**). For example, four (4) foot bike lanes adjacent to travel lanes would result in a QOS “D” and a five (5) foot buffered bike lane would result in a QOS of “B”. Multimodal Ways would fall under bike lanes 6’ + in width. Future Complete Street design standards, to be integrated into land development regulations, will further define the types of separation and markings.



**FIGURE 9. BICYCLING QUALITY OF SERVICE (QOS) STANDARDS**


**MOVING TOWARDS SAFER STREETS FOR ALL**

CITY OF ST. AUGUSTINE  
MULTIMODAL QUALITY OF SERVICE STANDARDS

MULTIMODAL QUALITY OF SERVICE STANDARDS FOR BICYCLING

FACILITY TYPE	LIMITED SEPARATION	PROTECTED	BUFFERED	GREEN LANE	POSTED SPEED LIMIT
BIKE LANE 6' +	B	A	A	A	SPEED LIMIT 30 A
BIKE LANE 5'	C	A	B	B	SPEED LIMIT 25 B
BIKE LANE 4'	D	A	B	C	SPEED LIMIT 20 C
PAVED SHOULDER	E	B	C	D	SPEED LIMIT 20 D

The presence of a physical separation features, along with pavement markings and posted speed limits would result in an increase in one letter grade.

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The City adopted QOS standards for transit based upon: (1) frequency of service, and (2) the type of transit service provided (Transportation and Mobility Element Policy 2.1.7) (**Figure 10**). The service standards are only for roadways or corridors that feature transit service. It should be recognized that the City has little say in the headways provided by future rail and bus operators. The City does have greater ability to pursue higher QOS standards for trolley transit circulators and may ultimately elect to utilize the QOS standards for public/private partnership proposals and during the annual capital improvements planning process. While streetcar service may be cost prohibitive over the next decade, the 2045 Cost Affordable Long Range Transportation Plan includes funding for regional rail service between Downtown Jacksonville and Downtown St. Augustine.


Rail service could potentially serve St. Augustine sometime between 2025 and 2035, well within the time frame of the 2040 Mobility Plan. Adding high levels of transit capacity generally requires dedicated lanes or exclusive rail, which can be cost prohibitive outside existing railroad corridors. One option several communities are exploring is the construction of aerial tramways (aka gondolas). While these are often thought of as something provided as ski resorts, an aerial tramway was recently constructed in Central Florida. The City of Clearwater is considering issuance of a request for proposal to explore an aerial tramway to deal with the significant congestion which occurs due to visitors attempting to access Clearwater Beach. Over the next ten years, the best opportunity to enhance transit access is exploring public/private partnerships for trolley transit circulator service.



**FIGURE 10. TRANSIT QUALITY OF SERVICE (QOS) STANDARDS**

**MOVING TOWARDS SAFER STREETS FOR ALL**

CITY OF ST. AUGUSTINE  
MULTIMODAL QUALITY OF SERVICE STANDARDS



MULTIMODAL QUALITY OF SERVICE STANDARDS FOR TRANSIT

FREQUENCY OF SERVICE	TROLLEY	BUS	STREETCAR	AERIAL TRAM
10 MINUTES OR LESS	A	A	A	A
15 MINUTES	B	B	B	B
30 MINUTES	C	C	C	C
45 MINUTES	D	D	D	D
60 MINUTES	E	E	E	E

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REPUBLIC DESIGN

The City of St. Augustine’s Mobility Plan consists of the following four plans: (1) Streets Plan; (2) Walking and Bicycling Plan; (3) Multimodal Ways Plan; and the (4) Transit Circulator Plan. The Streets Plan includes a mixture of complete streets and low-speed shared streets within Historic Districts of St. Augustine and along Masters Drive and Old Moultrie Road. Low-speed shared streets have already been constructed within the Historic District, such as portions of Hypolita Street and Spanish Street. To reduce regional cut-through traffic within the Historic District, improvements to SR 313 and the SR 312 Extension are shown. Improvements to West Castillo Drive from US 1 are proposed to enhance access to the Historic Downtown Parking Garage. The Streets Plan also proposes for FDOT to consider a new bridge connecting SR 16 and the Vilano Causeway (**Map A**).

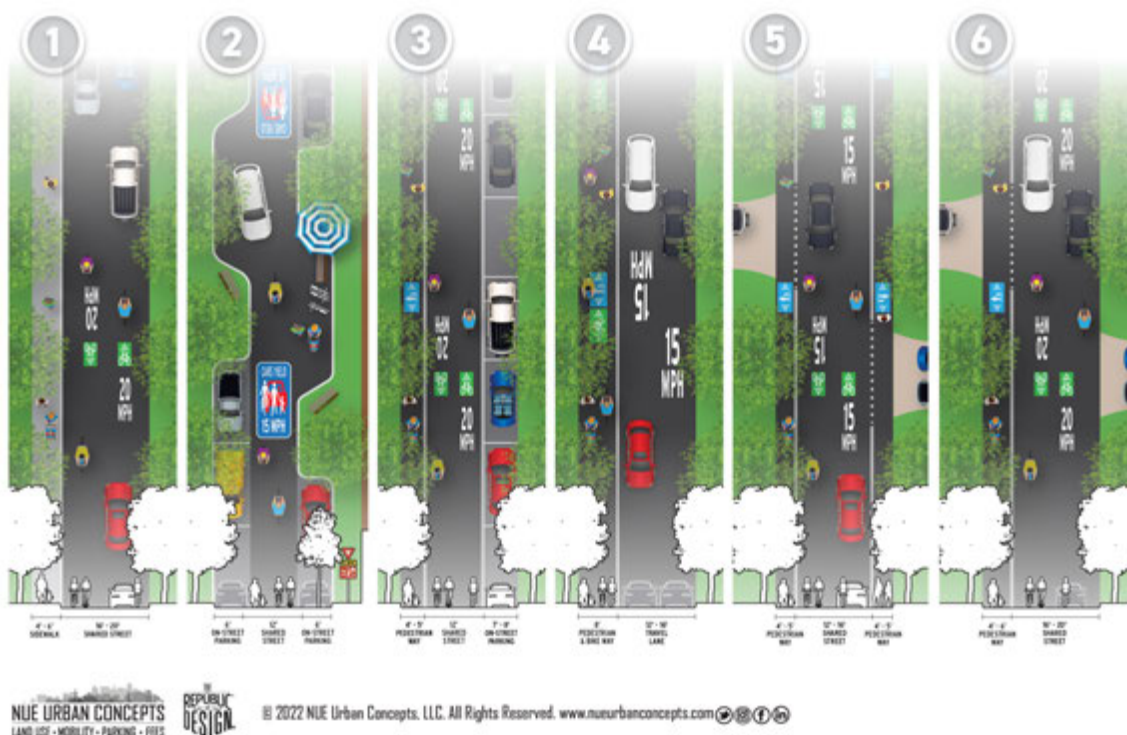
To enhance safety and connectivity for people walking and bicycling, a network of protected bike lanes and trails is proposed on City, County and State roads. The proposed trails along King Street, Anastasia Blvd, San Marco Avenue and the Vilano Causeway are part of the Florida SUN Trail network and the East Coast Greenway. Protected bicycle lanes are proposed along Ponce De Leon Blvd and A1A. A multimodal riverwalk is proposed along the redeveloping San Sebastian waterfront from King Street to SR 312. There are also several high-visibility crosswalks proposed at key intersections (**Map B**).



Many of the neighborhood streets within St. Augustine lack adequate right-of-way to provide sidewalks. Further complicating matters, mature tree canopy, existing utilities, stormwater systems, and frequent driveways and intersections make it expensive to add 5' wide concrete sidewalks that include required Americans with Disability Act (ADA) curb ramps, crosswalks, and driveway transitions. By adopting street QOS standards, the City can set lower speed limits and consider quick and easy implementation of sidewalks using pavement markings on existing asphalt. Areas 4' to 8' wide can be safely marked for use by people walking and bicycling at relatively low cost.

On some corridors, the City could also include on-street parking, which would result in what are known as yield streets. Yield streets are where travel lanes are wide enough for one car to pass and the other car has to “yield the right-of-way” by pulling aside into on-street parking, at driveways, or at transitions at intersections. This behavior already occurs in neighborhoods where on-street parking is permitted. The City has already successfully implemented this concept in portions of the City. The use of pavement markings allows the City to narrow travel lane widths while still ensuring emergency vehicles and waste management trucks still have convenient access. The advantage of using pavement marking as an initial quick solution, is that if certain routes have increased demand, the pavement markings can be converted into raised concrete sidewalks or serve as proof of demand to invest in providing raised sidewalks behind curbs or the edge of pavement. Below are several examples of quick fix sidewalk concepts (**Figure 11**):

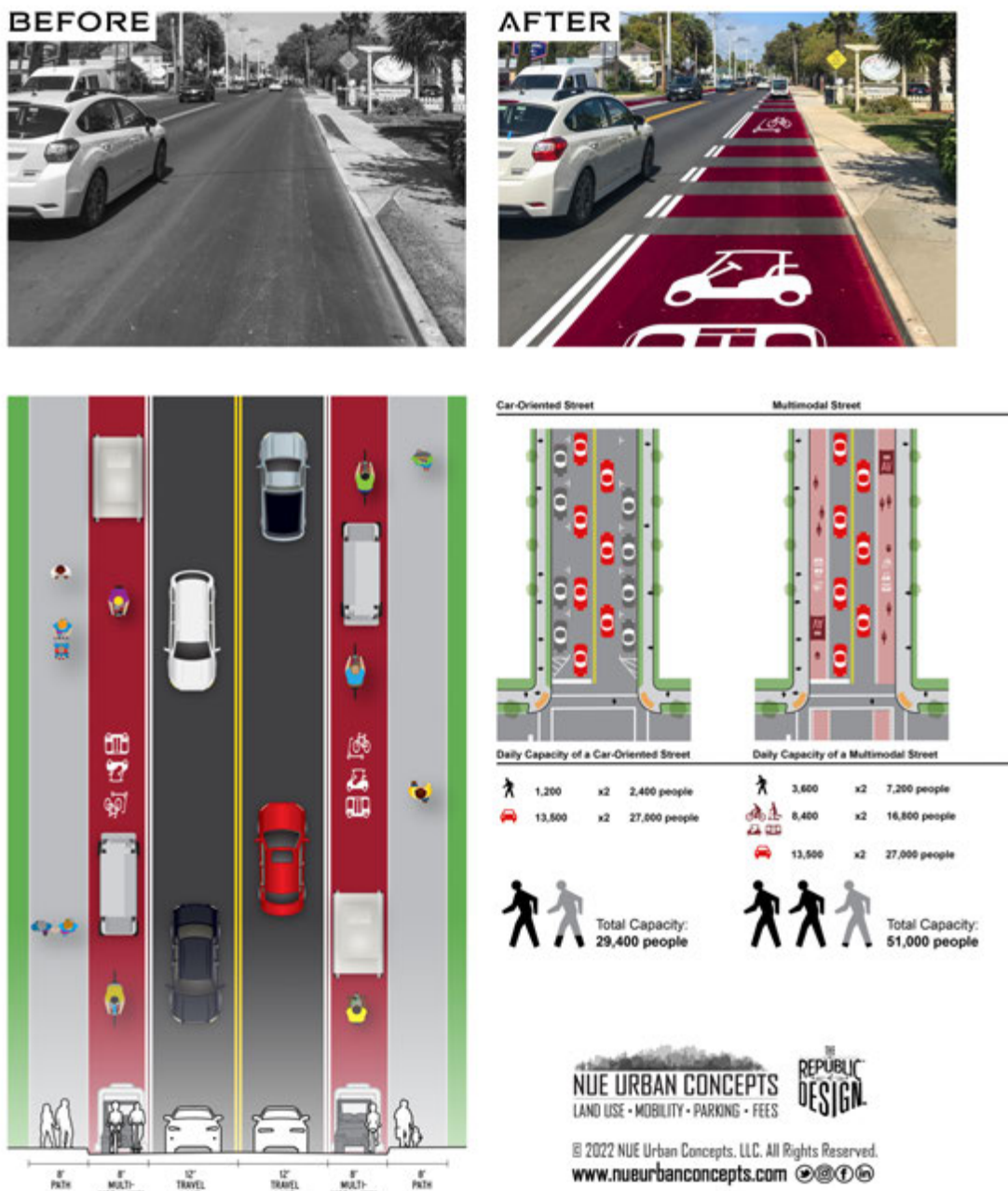
**FIGURE 11. QUICK FIX SIDEWALK CONCEPTS**





To facilitate transit circulation through microtransit vehicles (autonomous transit shuttles, golf carts, neighborhood electric vehicles, trolleys) and to provide a place for use of micromobility devices (electric bikes, electric scooters, personal electric mobility devices, Segways), multimodal ways are proposed along portions of King St, Anastasia Blvd and San Marco Ave (**Map C**). These multimodal ways would repurpose existing on-street parking and potentially parts of travel lanes or turn lanes to provide connections between parking garages, TODs, and the Historic District. The following is an example of multimodal ways on San Marco Avenue and the increase in person capacity (**Figure 12**).

**FIGURE 12. EXAMPLE MULTIMODAL WAY ON SAN MARCO AVENUE**





Multimodal Ways, combined with conversion of sidewalks to trails, have the potential to greatly enhance the number of people who could travel along San Marco Avenue within the existing right-of-way. The recent resurfacing of San Marco Avenue by FDOT has resulted in a reduction in on-street parking due to the frequency of driveways and intersections. Policies were established in the Comprehensive Plan to encourage park-once environments by providing parking garages on the periphery of the Historic District and exploring opportunities to provide pooled and shared off-street parking areas within the Historic District. Pooled and shared off-street parking would allow the City to relocate on-street parking and provide businesses with opportunities to provide off-site parking. The relocation of on-street parking will free-up existing street right-of-way to add multimodal ways.

As a major tourist destination, St. Augustine also experiences significant increase in congestion during peak seasons and for special events. Further, the City itself also functions as the downtown for St. Johns County, with its unique cultural and culinary offerings and boutiques. The City itself has seen steady population and employment growth and is projected to continue to experience steady growth. Meanwhile, St. Johns County continues to be one of the fastest growing Counties in Florida and the U.S. While City residents can take short trips down local streets, walk, or bike, most of the residents of unincorporated St. Johns County travel to the City by car on the major state roads. Combined with tourist travel demand, travel from residents in unincorporated St. Johns County results in increased congestion.

The effective management of parking is a major component of the 2040 Mobility Plan. The Plan proposes to create a park-once environment where on-street parking is converted to shorter duration times to encourage turnover and business access and visits of two hours or longer are encouraged to park in garages on the periphery of the Historic District. This is specifically reflected in Transportation and Mobility Element Policy 3.1.4, which states:

*“The Mobility Plan shall promote a park once environment with parking garages located outside of the multimodal district for longer duration visits generally exceeding three or more hours. Surface parking lots maybe initially provided with the intent of constructing parking garages. The Mobility Plan shall include transit circulator routes and identify water taxi docks, for public and/or private water taxi service, that connect the parking garages to destinations within the multimodal district. As more parking spaces are located in parking garages along the periphery of the multimodal district and frequent multimodal transportation options are provided, longer duration visits may include visits of two or more hours in length.”*

Currently, on-street parking is cheaper than parking in the Historic Central Parking Garage and offers parking up to four (4) hours in length. The TME includes policies to have the City continue development of innovative parking management strategies, including increasing hourly parking rates and establishing variable pricing, based on demand, for on-street and off-street surface



parking lots. Additional strategies include limiting the length of using on-street parking and off-street surface parking lots. Some spaces would be limited to thirty (30) minutes to promote high turnover and access to local business. Others may be limited to one (1) hour or two (2) hours in high demand areas with a higher concentration of restaurants or shops where visits exceed 30 minutes but are less than two (2) hours. This would result in employees, students, visitors that intend to stay in the multimodal district longer than two to three hours parking at the Historic Parking Garage initially and eventually in peripheral parking garages. The mobility plan envisions that micromobility and microtransit technology, such as electric bikes and autonomous transit vehicles, will provide mobility choices between the parking garages and the City's Historic Districts.

Parking management strategies will also include providing variable message signs at the major gateways to the City that direct visitors to parking garages and provide real time information on the availability and pricing of on-street and off-street surface parking within the multimodal district. While County residents may know that there is parking available, including private lots, the variable message signs have the potential to direct visitors to periphery parking locations. The City may also explore establishing a City resident parking permit plan that limits parking on residential streets to City residents only and could also include providing City residents discounted rates for on-street parking. Providing outreach to parking options for St Johns County residents who live outside the City, and who essentially think of St. Augustine as the Downtown for St. Johns County, is also a strategy that maybe included in future parking management initiatives.

These future garages could be served by the routes shown on the Transit Circulator Plan (**Maps D**). The proposed transit circulator routes illustrated on the Plan would provide employees, residents, students, and visitors quick access to the Historic District without spending time driving around looking for a parking spot. The Transit Circulator Plan also proposes water taxi stops through-out the City, several of which would be in close proximity to the future parking garages.

The Plan also identifies two potential transit-oriented developments (TODs) along future regional rail connecting Downtown Jacksonville to Downtown St. Augustine. The regional rail service is currently funded in the 2045 Long Range Transportation Plan and is programmed between 2025 and 2035. The regional rail would connect to future rail service that connects Miami, Orlando, Tampa, and West Palm Beach. As climate change challenges continue, including periodic flooding, the City will need to continue exploring innovative solutions, including the possibility of reducing impervious services, such as roads and surface parking lots. There will still be significant travel demand to the Historic District. A longer-term solution maybe the consideration of an aerial tramway connecting future garages on the east end or Anastasia Blvd and the west end of King Street. Aerial tramways are the one mode of transport that uses limited surface areas (less than 100 sq. ft. per pylon) and can move more people an hour and during the day than roads and railroads.



## MOBILITY FEE

The basis for the City of St. Augustine’s mobility fee are the multimodal projects identified in the Mobility Plan consistent with Florida Statute 163.3180(5)(i). The mobility fees collected from new development and are to be used to fund the multimodal projects identified in the Mobility Plan (**Figure 13**). The multimodal projects identified in the Mobility Plan are intended to provide the person miles of capacity needed to meet the future person miles of travel demand from new development, consistent with the “**needs**” requirement of the dual rational nexus test. The mobility fees collected from new development are to be used to fund the needed multimodal projects to provide a mobility benefit to new development and serve the increase in person travel demand from that development, consistent with the “**benefits**” requirement of the dual rational nexus test.

**Figure 13. Mobility Plan and Mobility Fee**





## EXISTING CONDITIONS EVALUATION

Case law and State Statute prohibit local governments from charging new development for over capacity or “backlogged” roadways. The intent of a mobility plan and a mobility fee is to provide a distinct alternative to transportation concurrency. One way to make a clean break from transportation concurrency and overcapacity or “backlogged” roads is to replace roadway LOS standards with street quality of service (QOS) standards based on the posted speed limit (**Figure 7**).

Roadway level of service (LOS) standards, and the associated road capacity provided, are based on the speed of travel for cars. The higher the roadway LOS standards the greater the number of lanes needed in order to obtain a desired speed of travel. Roadway LOS standards are an essential component in transportation concurrency.

The lower the Roadway LOS standards (“D” or “E”), the greater the capacity there is to move cars: up until traffic is gridlocked, which is known as LOS “F”. Roads in the City of St. Augustine, especially during peak tourism seasons, often experience gridlock during the morning and afternoon peak hours. However, adding travel lanes is physically impossible within the Historic District without destroying the character of St. Augustine. Proposed road capacity projects are limited to the periphery of the Historic District and the City to reduce regional cut-through traffic.

An existing conditions QOS evaluation for arterials and collectors within and adjacent to the City was conducted based on the street QOS standards (**Appendix A**). The existing conditions evaluation is intended to establish a baseline QOS analysis and will serve as a performance measure that will allow the City to quantify the change in QOS between Mobility Plan updates. The existing conditions street QOS evaluation replaces the “backlog” evaluation based on roadway LOS that would typically be conducted as part of a mobility fee analysis, in order to demonstrate that new development is not being charged for existing deficiencies.

**TABLE 1. EXISTING STREET QUALITY OF SERVICE (QOS) EVALUATION**

Location	QOS A	QOS B	QOS C	QOS D	QOS E
Miles	0 miles	3.74 miles	6.36 miles	2.03 miles	14.59 miles
% of the Network	0 miles	14.0%	23.8%	7.6%	54.6%
<b>Source:</b> Street Quality of Service based on existing posted speed limits and total miles of arterial and collector streets within and adjacent to the City ( <b>Appendix A</b> ). Data collected by NUE Urban Concepts as of February 2022.					



## GROWTH

The first requirement of the dual rational nexus for a mobility fee is to demonstrate that there is a need for future multimodal projects to accommodate the person travel demand from future growth. An evaluation of the projected population and employment was conducted for the City of St. Augustine based on the Northeast Regional Planning Model (NERPM) developed by the North Florida Transportation Planning Organization (TPO) 2040 Long Range Transportation Plan (LRTP). The regional planning model demonstrates that there is projected to be an increase in population and employment (**Table 2**). The population and employment data were obtained from the Traffic Analysis Zones (TAZs) used in the travel demand model (**Appendix B**). Due to unincorporated area enclaves within the City, the TAZ structure included some areas outside current City limits. The intent of the projected growth data is to illustrate the projected increase in population and employment by 2040 within and around the City that results in increases in person travel demand.

**TABLE 2. PROJECTED GROWTH**

	City of St. Augustine		St. Johns County	
Year	Population	Employment	Population	Employment
2018 / 2020	15,306	19,366	261,900	78,139
2040	28,678	29,062	387,771	155,412
Increase	13,372	9,698	125,871	77,273

*Source:* 2020 Population data based on Florida Estimates of Population, 2020 prepared by Bureau of Economic and Business Research (BEBR), College of Liberal Arts & Science, University of Florida, Gainesville, FL. The 2018 Employment Data provided by the U.S. Census Bureau OnTheMap. 2040 Population and Employment based on the Northeast Regional Planning Model (NERPM) developed by the North Florida Transportation Planning Organization (TPO) 2040 Long Range Transportation Plan (LRTP). The City of St. Augustine projections for 2040 may vary from other projections since the TAZ data includes areas adjacent to and within the City (**Appendix B**).

## VEHICLE MILES OF TRAVEL (VMT)

The growth in vehicle miles of travel (VMT) is one of the factors evaluated to determine the need for future multimodal projects. The Northeast Regional Planning Model (NERPM) developed by the North Florida Transportation Planning Organization (TPO) 2040 Long Range Transportation Plan (LRTP) was used to determine the VMT growth within and around the City of St. Augustine between 2010 and 2040 (**Table 3**). The VMT data was obtained from the model network evaluated as part of the mobility plan and mobility fee (**Appendix B**). Due to unincorporated area enclaves within the City, the model network and VMT data includes areas that are outside City limits. The intent of the data is to illustrate projected growth in VMT within and around the City. The analysis revealed that there is robust growth in vehicle travel demand within the City, the County, and Northeast Florida that will result in increased travel demand within the City.



**TABLE 3. GROWTH IN VEHICLE MILES OF TRAVEL (VMT)**

Year	St. Augustine	St. Johns County	Northeast Florida
2010 (model base year)	697,800	6,624,003	49,064,852
2020 (mobility plan base year)	831,951	9,285,903	58,713,783
2040 (model and plan future year)	1,100,251	14,609,704	78,011,647
VMT increase (2020 to 2040)	268,301	5,323,801	19,297,863

**Source:** The 2010 base year data and 2040 projections are based of the Northeast Regional Planning Model (NERPM) developed by the North Florida Transportation Planning Organization (TPO) 2040 Long Range Transportation Plan (LRTP). The 2020 mobility plan base year VMT was interpolated based on an annual growth rate of 1.53% for St. Augustine; 2.67% for St. Johns County; and 1.56% for Northeast Florida based on the increase in VMT between the 2010 base year model data and the 2040 horizon year model data. The VMT increase is based on the difference between 2020 and 2040. The model network includes enclave areas within the City and extends outside of City Limits (**Appendix B**).

## PERSON MILES OF TRAVEL (PMT)

The evaluation of future person miles of travel (PMT) is the initial component in the development of a mobility fee. To account for person trips made by walking, biking, riding transit, and vehicle occupancy in a multimodal travel environment, vehicle travel demand is converted into person travel demand based on data from the 2017 National Household Travel Survey (NHTS). Person travel demand, also referred to as person miles of travel, is calculated based on person trips and person trip length from the NHTS data. An evaluation of the personal travel data from the NHTS resulted in a PMT factor of 1.87 (**Appendix C**). The projected increase in PMT within and around St. Augustine between the Mobility Plan base year of 2020 and the Mobility Plan future year of 2040 is 501,721 (**Table 4**). The calculation for the increase in person miles of travel (PMT) is illustrated in further detail on **Figure 14**:

**TABLE 4. INCREASE IN PERSON MILES OF TRAVEL (PMT)**

Year	VMT & PMT
2020 Base Year Vehicle Miles of Travel (VMT)	831,951
2020 Base Year Person Miles of Travel (PMT)	1,555,748
2040 Future Year Vehicle Miles of Travel (VMT)	1,100,251
2040 Future Year Person Miles of Travel (PMT)	2,057,469
Increase in Person Miles of Travel (PMT)	501,721

**Source:** Base and future year vehicle travel data from **Table 3**. PMT obtained by multiplying VMT by 1.87. The calculation for the increase in person miles of travel is illustrated in **Figure 14**.



**Figure 14: Person Miles of Travel (PMT) Increase**

**Increase in Person Miles of Travel (PMTi)**

$$2020 \text{ PMT} = (2020 \text{ VMT} \times \text{PMTf})$$

$$2040 \text{ PMT} = (2040 \text{ VMT} \times \text{PMTf})$$

$$\text{PMTi} = (2040 \text{ PMT} - 2020 \text{ PMT})$$

**Where:**

<b>PMT</b>	<b>=</b>	<b>Person Miles of Travel</b>
<b>VMT</b>	<b>=</b>	<b>Vehicle Miles of Travel</b>
<b>PMTf</b>	<b>=</b>	<b>Person Miles of Travel factor of 1.87</b>
<b>PMTi</b>	<b>=</b>	<b>Person Miles of Travel Increase</b>

## MULTIMODAL CAPACITY

The multimodal projects identified in the Mobility Plan form the basis of the mobility fee. The multimodal projects necessary to serve person miles of travel demand include sidewalks, paths, trails, bike lanes, microtransit circulators, low speed and complete streets, streetscape, intersections, and roadways. These multimodal projects are necessary to meet future person miles of travel demand and lay the foundation for use of new micromobility devices such as electric pedal assist bicycles (e-bike) and microtransit vehicles such as autonomous transit shuttles, golf carts, trolleys, and neighborhood electric vehicles. To account for the capacity benefit of multimodal projects, the establishment of base person capacity rates are required for the multimodal projects included in the Mobility Plan.

The 2013 Florida Department of Transportation's (FDOT) Generalized Service Volume Tables were used to establish daily capacities for roadways and intersections (**Table 5**). A principal difference between a road impact fee based on vehicle miles of travel (VMT) and a mobility fee based on person miles of travel (PMT) is accounting for vehicle occupancy. To account for vehicle occupancy, the road capacities in **Table 5** are multiplied by a Vehicle Occupancy factor of 1.82, based upon data from the 2017 NTHS (**Appendix C**). The Vehicle Occupancy factor is used in the multimodal capacity analysis for road and intersection projects identified in the Mobility Plan. The capacities are based on a level of service (LOS) "D" standard. The four-lane highway capacity is used for the State Road 312 flyover. The four-lane flyover is not included in the mobility fee calculations as the project would either be fully funded by FDOT or a toll facility if it were to be constructed. The State Road 313 extension will be funded by FDOT and funds from the North Florida TPO and is shown on the Streets Plan in support of FDOT and County efforts to construct the road, it is not included in the mobility fee.



**TABLE 5. DAILY ROAD CAPACITIES**

Lane Type & Number	Vehicle Capacity	Person Capacity	Per Lane Person Capacity	Turn Lane Person Capacity
2-Lane Undivided (Class II)	15,600	28,200	14,100	710
4-Lane Divided (Class II)	33,800	61,200	15,300	770
4-Lane Divided (Class I)	39,800	72,000	18,000	900
4-Lane Highway	65,600	119,000	29,750	1,490

**Source:** Florida Department of Transportation, 2013 Quality/Level of Service (LOS) Handbook, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas (**Appendix D**). Capacities are based on a LOS D standard. The daily person capacity is based on a Vehicle Occupancy factor of 1.82 per the 2017 NHTS Data for Florida (**Appendix C**). Turn lane person capacity is derived by multiplying the daily person capacity by .5% per the FDOT Generalized Service Volume Tables. The person capacity is rounded to the nearest 100<sup>th</sup>. The per lane person capacity and turn lane person capacity are rounded to the nearest 10<sup>th</sup>.

The establishment of multimodal capacities for people walking and bicycling are based on methodologies from multiple technical reports and manuals. The capacities for people walking and bicycling are based on both a pedestrian and bicycle level of service (LOS) and a multimodal quality of service (QOS). There is an inverse relationship between the pedestrian and bicycle LOS and multimodal QOS for people walking, bicycling, and using micromobility. A pedestrian or bicycle LOS of “A” typically denotes few people are using a sidewalk or bike lane and there is ample room for people to freely walk, bicycle, or scoot. A pedestrian or bicycle LOS “D” typically denotes more people are using a sidewalk or bike lane and movements are restricted. A multimodal QOS “D” typically denotes an environment where there is minimal separation between people walking and bicycling and vehicles and there is often a lack of landscape, shade, streetscape, or protections from cars. In environments that feature a multimodal QOS “A”, there are often wider sidewalks, paths, or trails, with street trees and/or on-street parking and a landscape buffer that separate people walking, bicycling, and scooting from cars.

For people bicycling on-street, the presence of a protected barrier, a painted buffer or higher visibility green lane makes for a higher QOS. In Florida, most facilities for people walking, bicycling, and scooting feature a pedestrian or bicycle LOS “A” and a multimodal QOS “D” or “E”: meaning few, if any, people use the facilities to walk, bicycle, or scoot. The multimodal capacity for the various types of multimodal projects in the Mobility Plan are based on varying pedestrian or bicycle LOS and multimodal QOS standards (**Table 6**).



The establishment of capacities for multimodal ways is based on use by both micromobility devices and microtransit circulators. Microtransit circulators include a combination of golf carts, neighborhood electric vehicles (NEV), autonomous transit shuttles (ATS), and trolleys. The person capacities of microtransit circulators varies based on the vehicle and span of service (**Table 6**).

**TABLE 6. MULTIMODAL CAPACITIES**

Facility Type	Unit of Measure	Daily Capacity
Sidewalk	5' to 6' wide	2,400
Complete Street	Width Varies	3,600
Protected Bike Lane	6' to 8' wide	7,200
Multimodal Ways	8' to 9' wide	8,400
Multimodal Trail	10' to 12' wide	12,000
Riverwalk	12' to 20' wide	24,000
Low Speed Shared Street	Width Varies	36,000

**Source:** The capacity for sidewalks and complete streets is based on a pedestrian LOS "B" capacity and a QOS "C". The capacity for protected bike lanes, multimodal ways, the riverwalk, and trails is based on a QOS "A" and a bicycle LOS of "D". Capacity methodologies for sidewalks, paths, trails, bicycles, and the riverwalk are based on methodologies established in Transportation Research Record 1636 Paper No. 98-0066, the 2006 Shared-Use Path Level of Service Calculator-A User's Guide developed for the Federal Highway Administration, and the 2010 Highway Capacity Manual. The capacity for multimodal ways includes people bicycling, riding micromobility devices and microtransit vehicles. The capacity for the riverwalk and trails includes people bicycling, riding micromobility devices and walking. The capacity for protected bike lanes includes people bicycling and riding micromobility devices. The capacity for low-speed shared streets includes people bicycling, driving, riding micromobility devices and microtransit vehicles, and walking.

## MOBILITY PLAN PROJECTS

The Mobility Plan Projects for the (1) Streets Plan; (2) Walking and Bicycling Plan; (3) Multimodal Ways Plan; and (4) Transit Circulator Plan include a mixture of bike lanes, complete and low speed streets, multimodal ways, parking structures, roads, and trails (**Appendix E**). The Mobility Plan Projects also include several regionally significant improvements including an aerial tramway, regional rail connecting Downtown Jacksonville and Downtown St. Augustine, a bridge connecting State Road 16 and the Vilano Causeway, a flyover along a portion of State Road 312 and the State Road 313 extension. The State Road 312 flyover and the State Road 313 extension are not included in the mobility fee calculations and are shown in support of regional efforts to reduce cut-through traffic within St. Augustine.



The regional rail connecting Downtown Jacksonville and Downtown St. Augustine are also not included in the mobility fee calculation as the rail would be funded by federal and state funds allocated through the TPO. The bridge connecting SR 16 and the Vilano Causeway, and the aerial tramways are mobility plan projects that would provide both regional and citywide benefit. These two (2) projects are included in the mobility fee calculations at a rate of five (5) percent of the total cost and capacity to provide the City with flexibility to partially fund preliminary planning work for both multimodal projects. The bridge would likely be funded by federal and state funds or toll revenues and the aerial tramway would be funded by federal and state funds and fares paid by users of the aerial tramway system.

The multimodal capacity for Mobility Plan projects is included with the detailed list of multimodal projects for each of the four Plans (**Appendix E**). The Mobility Plan projects include several parking structures to be located at the periphery of the Multimodal District. The parking garages are included in the mobility fee calculations at a rate of five (5) percent of the total cost and capacity to provide the City with flexibility to partially fund a share of the parking garages and to provide private entities with potential mobility fee credit for providing spaces available for use by the general public. Most of the cost of the parking structures would be covered by private entities and parking revenues from end users parking at garages.

The multimodal capacity for each multimodal project is based on the capacities in **Tables 5 and 6** and project specific capacities documented for unique projects (**Appendix E**). The total cost of the multimodal projects is \$268,729,260 (**Appendix E**). The total person miles of capacity (PMC) provided by the multimodal projects is 727,102 (**Appendix E**).

Currently funded multimodal projects are needed to accommodate existing person travel demand and are not included in the mobility fee calculations. The multimodal cost for unfunded improvements identified in the mobility plan are based on the latest cost from projects completed by the City and supplemented by data from FDOT projects. The cost of design, right-of-way (ROW), construction, engineering and inspection (CEI), utility relocation, and landscape vary by the type of multimodal project (**Appendix E**). The total projected cost and person miles of capacity for the aerial tramway, the SR 16 to Vilano Causeway bridge and the parking structures is limited to five (5) percent (**Appendix E**). The following are the net person miles of capacity and project cost that will be utilized to calculate a person miles of capacity rate for use in mobility fee calculations (**Table 7**).



**TABLE 7. SUMMARY OF MULTIMODAL PROJECTS**

Mobility Plan Projects	Person Miles of Capacity	Cost of Projects
Multimodal	413,688	\$48,604,360
Roadway	31,130	\$8,325,000
Transit	26,800	\$8,000,000
Parking	1,878	\$2,612,500
Total	473,496	\$67,541,860
<i>Source:</i> The person miles of capacity and the cost of multimodal projects is detailed in <b>Appendix E</b> .		

The availability of funding for multimodal projects over the next 20 years is projected to come from a variety of funding sources. St. Johns County can allocate a portion of gas taxes towards City multimodal projects. Gas taxes have been declining locally, statewide and nationally as vehicles have become more fuel efficient and the percentage of electric vehicles and hybrid vehicles increase. Neither the Federal Government nor the State of Florida have raised gas taxes in a number of years. The gas taxes that are available are largely earmarked for maintenance and operations of the existing transportation network. The County could eventually place a referendum before residents to vote on an infrastructure sales tax. An infrastructure sales tax would provide additional funds to contribute towards multimodal projects identified in the Mobility Plan.

The Northeast Florida TPO has available funding identified through the Cost Feasible Long Range Transportation Plan (LRTP). Most projected funding is allocated towards improvements on the Strategic Intermodal System (SIS), with a significant amount of the funds allocated toward Interstate 95. There is a pool of funds available to fund improvements on the State Highway System (SHS). In addition, there are off SHS improvements, as well as several additional pools of funds identified in the LRTP, which could fund some multimodal projects.

Historically, there have been grants, earmarks and the use of the various pool of funds identified in the LRTP to allocate towards multimodal improvements in St. Johns County and the City of St. Augustine. While there are specific multimodal projects identified as funded in the LRTP, there are several that are eligible for funding and have been identified under various pools of available funding. These funds are typically part of a competitive process that identifies projects as part of the annual update of the TPO Transportation Improvement Program (TIP).



There are potential revenues from parking structures and tourist development taxes. There is also the opportunity to piggyback projects on utility and climate change resiliency projects. In recognition of the availability of funding through the LRTP, historic grants, earmarks, and other sources of funds available to St. Johns County and the City of St. Augustine, the mobility fee calculations include \$27,500,000 in reasonably anticipated funding between 2020 and 2040, or \$1,375,000 a year over a 20-year period (**Table 8**). This funding amount is subject to change on an annual basis.

**TABLE 8. REASONABLY ANTICIPATED AVAILABLE FUNDING**

Multimodal Project Cost	\$67,541,860
Reasonably Anticipated Available Funding	\$27,500,000
Unfunded Multimodal Project Cost	\$40,041,860
<b>Source:</b> The multimodal project cost provided in <b>Table 7</b> . Anticipated available funding based on historic available funding at a rate of \$1,375,000 per year over a 20-year period. The unfunded multimodal improvement cost obtained by subtracting the potentially available funding sources and the total multimodal improvement cost.	

## NEW GROWTH EVALUATION (NGE)

To ensure that new growth is not paying for more than its fair share of the cost of the multimodal projects identified in the Mobility Plan, as required by case law and Florida Statute, it is necessary to evaluate the projected increase in person miles of travel (PMT) versus the projected increase in person miles of capacity (PMC). A new growth evaluation (NGE) factor ratio less than 1.0 means that more capacity is being provided than is needed to accommodate future travel demand and would require a reduction in the overall cost of capacity projects attributable to new growth. A ratio greater than 1.0 means that new development is not being charged more than its fair share of the cost of Mobility Plan projects and that no adjustments are needed. The new growth evaluation is calculated by dividing the increase in PMC from **Table 4** by the increase in PMC from **Table 7** (**Figure 15**).

**FIGURE 15. NEW GROWTH EVALUATION**

<b>New Growth Evaluation (NGE)</b>	
$PMCi = \sum (LENmp \times CAPmp)$	
$NGEf = (PMTi / PMCi)$	
<b>Where:</b>	
$LENmp$	Length of Multimodal Projects in the Mobility Plan
$CAPmp$	Capacity of Multimodal Projects in the Mobility Plan
$NGEf$	New Growth Evaluation factor
$PMTi$	Person Miles of Travel increase
$PMCi$	Person Miles of Capacity increase



The projected demand-to-capacity Ratio is 1.06%, which is greater than 1.0 (**Table 9**). The multimodal projects identified in the Mobility Plan and included in the mobility fee provide sufficient person capacity to meet future person travel demand. Thus, new growth is not being charged more than its fair share of the cost of multimodal projects and the calculated cost are reasonably attributable to new growth. For purposes of the mobility fee calculation, the NGE factor is set at 1.0.

**TABLE 9. NEW GROWTH EVALUATION (NGE)**

Increase in Person Miles of Travel (PMT)	501,721
Increase in Person Miles of Capacity (PMC)	473,496
Demand-to-Capacity Ratio	1.06%
<i>Source:</i> The increase in person miles of travel is based on <b>Table 4</b> . The increase in person miles of capacity is based on <b>Table 8</b> . The new growth evaluation calculation is based on the formula in <b>Figure 15</b> .	

## PERSON MILES OF CAPACITY RATE (PMCr)

The person miles of capacity and cost of multimodal projects in **Table 7** and the calculation of unfunded multimodal projects in **Table 8** are used in the formula to calculate the person miles of capacity (PMC) rate by dividing the unfunded cost of multimodal projects by the increase in person miles of capacity (PMC) (**Figure 16**). With unfunded multimodal project cost of \$40,041,860 and a PMC increase of 473,496, the calculated PMC rate is \$84.57 (**Table 10**).

**FIGURE 16. PERSON MILES OF CAPACITY RATE (PMCr)**

<b>Person Miles of Capacity Rate (PMCr)</b>	
TPMCmi Formula	$= \sum (LENmi \times CAPmi)$
GCSTmp Formula	$= \sum ((LENmi \times CSTmi) + CSTmsp)$
NCSTmp Formula	$= (GCSTmp - FUN)$
UCSTmp Formula	$= (NCSTmp \times NGEf)$
PMCr Formula	$= (UCTmp / TPMCmi)$
<b>Where:</b>	
LENmi	= Length of Multimodal Improvements
CAPmi	= Capacity of Multimodal Improvements
CSTmi	= Cost of Multimodal Improvements
CSTmsp	= Cost of Multimodal Services & Programs
GCSTmp	= Gross Cost of Multimodal Projects
FUN	= Funding reasonably anticipated to be available
TPMCmi	= Sum of Person Miles of Capacity of all Multimodal Improvements
NCSTmp	= Net Cost of all Multimodal Projects
UCSTmp	= Unfunded Cost of Multimodal Projects
PMCr	= Person Miles of Capacity Rate



**TABLE 10. PERSON MILES OF CAPACITY RATE (PMCr)**

Unfunded Multimodal Improvement Cost (UNFmp)	\$40,041,860
Person Miles of Capacity Increase (PMCi)	473,496
Person Miles of Capacity Rate (PMCr)	\$84.57
<b>Source:</b> The cost of unfunded multimodal projects is obtained from <b>Table 8</b> . The increase in person miles of capacity is obtained from <b>Table 7</b> . The person miles of capacity rate are determined by the calculation illustrated in <b>Figure 16</b> .	

## MOBILITY FEE ASSESSMENT AREA

There are two kinds of geographic areas in mobility fee systems: assessment areas and benefit districts. Assessment areas are based on either a physical location, such as a downtown, or a type of development pattern, such as a traditional neighborhood development (TND). New growth within the City only pays the mobility fee rate applicable to the assessment area in which the new growth is located. A benefit district is an area within which mobility fees collected are earmarked for expenditure as required by the second test of the dual rational nexus test.

A single mobility fee assessment area is proposed for the City. Two assessment areas had been developed. However, based on community feedback and input from the City’s Planning and Zoning Board, it was recommended that a single assessment area be established. The mobility fee assessment area will apply uniformly through-out the City. In the future, the City may wish to consider varying assessment areas based on either location or type of development pattern, such as vertically mixed-use developments.

## PERSON TRAVEL DEMAND (PTD) PER LAND USE

The second component in the calculation of a mobility fee is the calculation of person travel demand for each land use included on the mobility fee schedule. The factors utilized in the calculation of person travel demand for each land use are the principal means to achieve the “rough proportionately” test established by the courts and Florida State 163.31801. The person travel demand for a given land use is based on trip generation, pass-by trips, conversion of net trips to person trips, multiplied by person trip lengths, and origin and destination adjustments. **Figure 17** illustrates the formula used to calculate the person travel demand for each land use.



**FIGURE 17. PERSON TRAVEL DEMAND (PTD) PER USE**

**Person Travel Demand (PTD) per Use**

$$PTD = (((TG \times \% \text{ NEW}) \times PTf) \times PTI) \times ODAf$$

**Where:**

PTD = Person Travel Demand per Use

PMTLUomd = Person Travel Demand per Land Use outside Multimodal District Area

TG = Trip Generation

% NEW = Percent of Trips that are Primary Trips

PTf = Person Trip Factor by Trip Purpose

PTI = Person Trip Length by Trip Purpose

ODAf = Origin & Destination Adjustment factor of 50% to avoid the double-counting of trips

### Trip Generation

Trip generation rates are based on daily trip information published in the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11<sup>th</sup> edition*. The detail for the daily trip generation rates for each land use is included in **Appendix F**.

### % New Trips

The percentage of new trips is based on a combination of the various pass-by analyses provided in ITE's Trip Generation Handbook, 3rd edition and various traffic studies conducted throughout Florida. The percentage of new trips differs slightly from the commonly used pass-by trip term as it is the percentage difference in trips after pass-by trips are deducted. The concept is better understood based on the following example: (10 trips x (100% - 30% pass-by rate)) = 7 trips or 70% new trips). While the ITE's Trip Generation does not recognize pass-by rates for uses other than retail, pass-by rates are utilized for uses such as offices, day care, entertainment and recreation uses to reflect how people move about the community. A pass-by trip is a trip that is traveling and stops at another land use between an origin point (commonly a dwelling) and a destination (place of employment). The detail for the % new trips is included in **Appendix F**.

### Person Trip Factor

The person trip factor is used to convert vehicle trips to person trips based on the recently released 2017 National Household Travel Survey (NHTS). To obtain the most recent and localized data, the travel survey was evaluated specifically for Florida. The person trip factors vary by trip purpose. There are two sets of person trip factors. The person trip factor is based on trips of 10 miles or less (**Appendix G**). The survey data used to calculate the person trip factor is based on over 6,200 unique survey data points from the 2017 NHTS.



### Person Trip Length

The person trip length is based on the recently released 2017 National Household Travel Survey (NHTS). To obtain the most recent and localized data, the travel survey was evaluated specifically for Florida. The person trip lengths vary by trip purpose. There are two sets of person trip lengths. The person trip lengths are based on trips of 10 miles or less (**Appendix G**). The survey data used to calculate the person trip length is based on 6,200 plus unique survey data points.

### Origin and Destination Adjustment Factor

Trip generation rates represent trip-ends at the site of a land use. Thus, a single origin trip from home to work counts as one trip-end for the residence and from work to the residence as one trip-end, for a total of two trip ends. To avoid double counting of trips, the net person trips are multiplied by 50%. This distributed the impact of travel equally between the origin and destination of the trip and eliminates double charging for trips.

### Person Travel Demand (PTD) per Use

The result of multiplying trip generation rates, percentage of new trips, person trip length, the person trip factor and the origin and destination factor are the establishment of a per unit person miles of travel per use (**Appendix H**). The PTD per use reflects the projected person travel during an average weekday by the various uses in the mobility fee schedule.

## MOBILITY FEE SCHEDULE

To ensure the rough proportionately test is addressed, the impact of individual land uses is evaluated through the development of a mobility fee schedule. The mobility fee is based on the person travel demand (PTD) for each land use within the two (2) assessment areas and the person miles of capacity rate (PMCr) established in **Table 10**. The calculated person miles of travel for each land use represents the full impact of that land use within the City (**Appendix I**). Payment of the mobility fee addresses full mitigation of the person travel demand generated by new development and redevelopment within the City. The calculations for determining the mobility fee per land use within each assessment area are illustrated in **Figure 18**.

**FIGURE 18. MOBILITY FEE CALCULATION**

<b>Mobility Fee per Use (MFu)</b>	
<b>MFu Calculations</b>	<b>= PTD x PMCr</b>
<b>Where:</b>	
<b>PTDmd</b>	<b>= Person Travel Demand per Use</b>
<b>PMCr</b>	<b>= Person Miles of Capacity Rate</b>
<b>MFu</b>	<b>= Mobility Fee per Use</b>



The proposed mobility fee schedule seeks to strike a balance between the City’s Comprehensive Plan and current market trends. The recommended land uses included on the mobility fee schedule enable the City to use the mobility fee to implement the Comprehensive Plan and encourage desirable land uses and job creating land uses. The calculated mobility fee per use is provided in the mobility fee schedule (**Table 11**). The mobility fee is provided on a per sq. ft. basis, except for uses based on another unit of measure. For uses where the mobility fee is based on a unit of measure other than sq. ft., such as hotel or marina, the mobility fee schedule provides the applicable unit of measure. The mobility fees are rounded to the nearest hundredth place.

The mobility fee schedule proposes a streamlined approach to residential mobility fees that is easy to administer and addresses affordability. The schedule proposes a flat residential mobility fee rate per square foot, regardless of whether the residential use is single family, townhome, multi-family, or active adult. The mobility fee is set-up so that a 600 sq. ft. cottage pays a mobility fee for 600 sq. ft., if a house is 10,000 square foot, the mobility fee will be based on 10,000 sq. ft. The conversion to a per sq. ft. fee is consistent with how the building industry prices permits.

The City Council may wish to establish a maximum square footage for which a residential mobility fee would be assessed. Traditional fee assessments for residential uses includes fees based on either: (1) type of dwelling unit; (2) type of dwelling unit separated into tiers, or (3) type of dwelling unit separated on a per bedroom basis. The per sq. ft. approach is the most straightforward means to address affordability and overall impact.

The mobility fee schedule is broken down into three (3) components. The first (1<sup>st</sup>) component are overall categories of uses, such as residential or office. These overall categories include multiple uses under each category heading. These categories also specify the unit of measure to determine how the mobility fee will be calculated for the uses, such as per square foot (sq. ft.) or per the number of rooms. The second (2<sup>nd</sup>) component are individual use classifications such as community serving based on similar person travel demand and overall purpose for the use. These individual use classifications may be followed by representative examples of specific uses under each classification. The use classifications are what NUE Urban Concepts is recommending. The third (3<sup>rd</sup>) component is the mobility fee. The following is an example of each component of the mobility fee schedule:

<b>Components of a Mobility Fee Schedule</b>	
<b>Use Categories, Land Uses Classifications, and Representative Land Uses</b>	<b>(3<sup>rd</sup> - Mobility Fee)</b>
<b>(1<sup>st</sup> - Use Category) = Institutional Uses per sq. ft.</b>	
<b>(2<sup>nd</sup> - Use Classification) = Community Serving (Example = Civic, Place of Assembly)</b>	<b>\$0.00</b>



**TABLE 11. MOBILITY FEE SCHEDULE**

Use Categories, Land Uses Classifications, and Representative Land Uses	Mobility Fee
<b>Residential &amp; Lodging Uses per unit of measure</b>	
Residential per sq. ft.	\$1.05
Overnight Lodging (Bed & breakfast, Hotel, Inn, Motel, Vacation Rental) per room	\$1,763
Mobile Residence (Mobile Home, Recreational Vehicle, Travel Trailer) per space or lot	\$1,216
<b>Institutional Uses per sq. ft.</b>	
Community Serving (Civic, Place of Assembly, Museum, Gallery)	\$0.86
Long Term Care (Assisted Living, Congregate Care Facility, Nursing Facility)	\$0.87
Private Education (Day Care, Private Primary School, Pre-K)	\$1.57
<b>Recreational Uses per sq. ft., unless otherwise indicated</b>	
Marina (Including dry storage) per berth	\$370
Outdoor Commercial Recreation (Amusement, Golf, Multi-Purpose, Sports, Tennis) per acre	\$1,873
Indoor Commercial Recreation (Gym, Indoor Sports, Kids Activities, Recreation)	\$3.54
<b>Industrial Uses per sq. ft.</b>	
Industrial (Assembly, Manufacturing, Nursery, Outdoor Storage, Warehouse, Utilities)	\$0.58
<b>Office Uses per sq. ft.</b>	
Office (Bank, General, Higher Education, Professional)	\$1.62
Medical Office (Clinic, Dental, Emergency Care, Hospital, Medical, Veterinary)	\$2.43
<b>Commercial &amp; Retail Uses per sq. ft., unless otherwise indicated</b>	
Local Retail (Entertainment, Restaurant, Retail, Sales, Services)	\$1.71
Multi-Tenant Retail (Entertainment, Restaurant, Retail, Sales, Services)	\$3.42
Free-Standing Retail (Entertainment, Restaurant, Retail, Sales, Services)	\$4.67
<b>Additive Fees for Commercial Services &amp; Retail Uses, unit of measure as indicated</b>	
Bank Drive-Thru or Free-Standing ATM per lane or ATM	\$7,174
Motor Vehicle & Boat Cleaning (Detailing, Wash, Wax) per lane or stall	\$3,420
Motor Vehicle Charging or Fueling per charging or fueling position	\$6,318
Pharmacy Drive-Thru per lane	\$4,500
Quick Service Restaurant Drive-Thru per lane	\$16,862



## MOBILITY FEE CALCULATIONS

The following are a few examples for how the mobility fee would be calculated for a use:

**Single Family Detached Dwelling Unit (2,000 sq. ft.)**

Mobility Fee: 2,000 sq. ft. x \$1.05 per sq. ft. = \$2,010

**Single Family Attached / Townhouse (1,600 sq. ft.)**

Mobility Fee: 1,600 sq. ft. x \$1.05 per sq. ft. = \$1,680

**Multi-Family Dwelling Unit (1,000 sq. ft.) Inside Multimodal District Area**

Mobility Fee: 1,000 sq. ft. x \$1.05 per sq. ft. = \$1,005

**Overnight Lodging (100 rooms)**

Mobility Fee: 100 rooms x \$1,763 per room = \$176,300

**Outdoor Commercial Recreation (10 acres)**

Mobility Fee: 10 acres x \$1,873 per acre = \$18,730

**Office (3,000 sq. ft.)**

Mobility Fee: 3,000 sq. ft. x \$1.62 per sq. ft. = \$4,860

**Doctors Office (4,000 sq. ft.)**

Mobility Fee: 4,000 sq. ft. x \$2.43 per sq. ft. = \$9,720

**Local Retail (2,500 sq. ft.)**

Mobility Fee: 2,500 sq. ft. x \$1.71 per sq. ft. = \$4,275

**Restaurant (3,000 sq. ft.) in a Multi-Tenant Center**

Mobility Fee: 3,000 sq. ft. x \$3.42 per sq. ft. = \$10,260

**Free Standing Convenience Store (5,000 sq. ft.) with-out Gas**

Mobility Fee: 5,000 x \$4.67 per sq. ft. = \$23,350

**Free Standing Convenience Store (5,000 sq. ft.) with eight (8) Fuel Positions (FP)**

Mobility Fee: 5,000 x \$4.67 per sq. ft. = \$23,350 plus 8 FP \$6,318 x 8 = \$50,544  
\$23,350 + \$50,544 = \$73,894

**Free Standing Quick Service Restaurant (2,000 sq. ft.) with-out Drive-Thru**

Mobility Fee: 2,000 x \$4.67 per sq. ft. = \$9,340

**Free Standing Quick Service Restaurant (2,000 sq. ft.) with one Drive-Thru Lane**

Mobility Fee: 2,000 x \$4.67 per sq. ft. = \$9,340 plus One Drive-Thru = \$16,862 = total \$26,202



## ST. JOHNS ROAD IMPACT FEE COMPARISON

The City of St. Augustine does not currently assess a road impact fee or a mobility fee. St. Johns County has assessed a road impact fee for over 20 years in the unincorporated portions of the County. The County assesses a uniform road impact fee per use across the County (**Appendix I**). The County last updated its road impact fee in 2018, with a significant increase in residential road impact fees and a political decision to reduce the road impact fee by 40% for non-residential uses. The County indicated at the time that they would pay the 40% reduction from other revenue sources. It is unknown if the County has allocated other revenues to make up the difference. Regardless of whether the County does or does not make up the difference, new development in unincorporated County is assessed a road impact fee for non-residential uses that is reduced by 40%. Caution is needed whenever comparing fees between local governments.

The County road impact fee is not based on a plan of improvements. It is calculated based on vehicle miles of travel and features a schedule of uses that is different than the schedule developed for St. Augustine's mobility fee. The St. Augustine mobility fee is based on the multimodal projects included in the 2040 Mobility Plan and the mobility fee is based on the person miles of capacity provided by the multimodal projects and the person travel demand from new development. The County's road impact fee features tiered rates for residential units. The City's mobility fee features a flat rate per square foot, which more accurately reflects impact. The residential rates are significantly lower in the City than those assessed in the County. The mobility fee rates for non-residential uses are closer to the St. Johns non-residential rates. A comparative analysis has been prepared between the City's mobility fee and the approximate equivalent use in the County (**Appendix J**). The comparison shows the City's fee per 1,000 sq. ft. or applicable unit of measure. This was done for comparison purposes only. The comparison also includes the City's mobility fee per sq. ft. of applicable unit of measure. The comparison is not apples to apples as both fees have different uses and both fees are based on different methodologies.

## MOBILITY FEE BENEFIT DISTRICT

The benefit test of the dual rational nexus test requires that local governments establish separate areas within which mobility fees collected are earmarked for expenditure. The mobility fee proposes a single Citywide Benefit District (**Map E**). The establishment of a Mobility Fee Benefit District ensures that mobility fees collected within the District are expended on multimodal projects within the District to the benefit of development which pays the fee. Implementation of the Mobility Fee Benefit District ensures the second requirement of the dual rational nexus test is met by clearly defining where funds are collected and where they are expended.



## DEFINITIONS

The following are definitions of unique terms referenced in this Technical Report. These definitions will be incorporated by reference into the implementing ordinance:

*Additive Fee* means a mobility fee based on a unit of measure that is assessed for a component of a high impact use that is outside of the square footage of the building and generates person travel demand. Additive fees are combined with any assessed mobility fee based on the square footage of a building or structure for the use. The mobility fee rate for additive fees is based on the unique units of measure under the additive fee category.

*Assessment Area* shall mean means a geographic area of the City where mobility fees are assessed on new development activity.

*Autonomous transit shuttle* shall mean a vehicle that uses artificial intelligence, sensors and global positioning system coordinates to drive itself with or without the active intervention of a human operator.

*Bank Drive-Thru or Free-Standing ATM* shall mean any bank or financial institution with a drive-thru lane used for banking purposes such as deposits, withdrawals, balance inquires, or bill pay. The drive-thru may include either a teller window, pneumatic device for transferring banking information or funds, or an Automated Teller Machine (ATM). An ATM inside or attached to a building that has a use open to the public or end user is not assessed a separate fee as a stand-alone ATM. Credit Unions and Savings and Loans are also considered to be banks for purposes of this definition and the applicable mobility fees. This use also includes free standing bank drive-thru lanes and freestanding walk-up or drive-thru ATM machines. The fee shall be based upon the total number of drive-thru lanes with a banking window, pneumatic device or ATM and/or the total number of free-standing ATM's. Free-standing ATM's may be either walk-up or feature drive-thru lanes.

*Benefit District* shall mean areas designated in the applicable mobility fee ordinance where fees that are paid by new development activity are expended.

*Capacity* shall mean the maximum sustainable flow rate, at a service standard, at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a bicycle facility, pedestrian facility, roadway, or shared-use multimodal facility during a given time-period under prevailing conditions. For transit, the capacity is the maximum number of persons reasonably accommodated riding a transit vehicle, along with the frequency and duration of transit service.

*Commercial and retail* shall mean those activities which provide for sale, lease or rent of products, good, services, entertainment, consumption, accommodations or use of space to individuals, businesses, or groups and which include those uses specified in the ITE Trip Generation Manual under Land Use Code Series 800 and 900, except for land uses otherwise defined separately within the mobility fee schedule.



*Commercial and Retail Uses* shall mean those commercial activities which provide for sale, lease, or rent of goods, products, services, vehicles, or accommodations for use by individuals, businesses, or groups and which include those uses specified in the ITE Trip Generation Manual under Land Use Code Series 800 and 900.

*Community Serving* shall mean those uses that are operated by non-profit civic originations, governmental entities, foundations, or fraternal organizations, including places of assembly. Community serving also includes uses such as YMCA, museum, art studio, gallery, cultural center, community meeting spaces, community theater, library, or a fraternal or masonic lodge or club, or any community and civic based uses that do not sell retail goods or services for profit and that participates in community and public activities. Food, beverages, goods, and services maybe offered for ancillary fundraising and sales to support the community serving use.

*Complete Streets* shall mean a transportation policy and design approach that requires multimodal transportation improvements to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation and to allow for safe travel by those walking, bicycling or using other forms of non-motorized travel, riding public transportation or driving motor vehicles or low speed electric vehicles. Separate and defined spaces are provided for the various modes of travel planned within the street cross-section.

*Free-Standing Retail* shall mean entertainment, personal service, and retail uses in a single building where any single use under common ownership exceeds 75% of the total square footage of the building. Land Use Codes under the 800 and 900 series and Land Use Codes 445.

*Indoor Commercial Recreation* shall mean that primarily focus on individual or group fitness, exercise, training or provide recreational activities. The uses typically provide exercise, dance or cheerleading classes, weightlifting, yoga, Pilates, cross-fit training, fitness and gymnastics equipment. Indoor commercial recreation also includes uses such as bowling, pool, darts, arcades, video games, batting cages, trampolines, laser tag, bounce houses, skating, climbing walls, and performance centers. Food, beverages, equipment and services maybe offered for ancillary sales.

*Industrial* shall mean those activities which are predominantly engaged in building and construction trades, the assembly, finishing, processing, packaging, or distribution of goods or products, utilities, recycling, waste management and uses that include brewing and distilling that may have taps, sampling or tasting rooms, and include those uses specified in the ITE Trip Generation Manual under Land Use Code Series 000 and 100 but excluding governmental uses. Industrial uses typically have ancillary office space and may have display or merchandise display areas for various trades and industries that are not open to the general public. Industrial uses are also located in land uses and zoning districts intended for industrial uses. Commercial storage means facilities or acreage in which one or more warehouses, storage units or vaults are rented for the storage of goods and/or acreage or is providing for the storage of boats, RVs, vehicle trailers and other physical items that are larger



than what is typically stored within an enclosed structure. The acreage for outdoor storage, excluding drive aisles, buffers, and stormwater management areas, shall be converted to square footage for purposes of calculating the fee. This shall not include an individual's personal property where such items are stored by the owner of the land and not for commercial purposes, subject to allowance by land development and zoning regulations.

*Industrial Uses* shall mean those activities which are predominantly engaged in the assembly, finishing, processing, packaging, and/or storage, warehousing or distribution of products and which include those uses specified in the ITE Trip Generation Manual under Land Use Code Series 000 and 100 but excluding governmental uses.

*Institutional Uses* shall mean those public or quasi-public uses that serve one or more community's social, educational, health, cultural, and religious needs and which include those uses specified in the ITE Trip Generation Manual under the Land Use Code Series 500, and includes Land Use Codes 253, 254, 255, and 620. Land Use Codes 540 and 550 are included in office uses and 580 and 590 falls under Community Serving. Federal, state, and local government institutional uses, except for Community Development Districts, are exempt from payment of mobility fees, unless authorized by law.

*ITE Trip Generation Manual* shall mean and refer to the latest edition of the report entitled "Trip Generation" produced by the Institute of Transportation Engineers (ITE), and any official updates hereto, as approved by Public Works.

*Level of Service (LOS)* shall mean a quantitative stratification of the level of service provided to a by a facility, roadway, or service stratified into six letter grade levels, with "A" describing the highest level and "F" describing the lowest level: a discrete stratification of a level of service continuum.

*Local Retail* shall mean entertainment, restaurant, retail, sales, or services under ITE Land Use Codes 800 and 900 that are locally owned and are not national chains or national franchisee. Local shall be defined as five or fewer locations in Florida and no locations outside Florida. Local retail uses maybe located in multi-tenant or free-standing buildings. The City Commission may expand the definition of local in the administrative procedures to include retail uses founded or with headquarters in Clay, Duval, Flagler, or St. Johns Counties, along with other criteria for determining uses that would qualify as local retail.

*Long Term Care* shall mean communities designed for long term care of on-site residents, such as assisted living facilities, congregate care facilities and nursing homes, with common dining and on-site health facilities for residents that is not a general retail or commercial use open to the public. This use includes ITE Trip Generation Manual Land Use Codes 253, 254, 255, and 620.

*Low Speed Streets* shall mean a multimodal transportation facility based on either the Dutch Woonerf concept that treats all modes equally with no defined spaces for any mode or bicycle boulevards which deprioritize vehicles and feature pavement markings, signage and posted speed



limits. Low speed streets also include shared streets which typically do not have raised curbs, distinct pavement markings, traffic control devices, defined parking spaces, or vehicular speed limit signs or have posted speed limits 15 MPH or less. A low-speed street often features signage and sometimes a speed limit that indicates there are multiple users of the shared street.

*Marina* shall mean facilities that provide docks and berths for boats. Any buildings for shops, retail, or restaurants would fall under the retail land use and pay the mobility fee rate for retail uses.

*Medical Office* shall mean a building or buildings that provide medical, dental or veterinary services and care. Medical office shall also include any clinics, emergency care uses, hospitals and any uses specified in the ITE Trip Generation Manual under Land Use Code Series 600, including Land Use Code 720. Land Use Code 620 is included under Long Term Care land uses.

*Micromobility* shall mean electric powered personal mobility devices such as electric bicycles, electric scooters, hoverboards, One-Wheel, Unicycle, electric skateboards and other electric assisted personal mobility devices. Low speed vehicles such as golf carts or mopeds are not considered personal micromobility devices.

*Microtransit Vehicle* shall mean low speed vehicles such as autonomous transit shuttles, golf carts neighborhood electric vehicles, or trolleys subject to requirements established by a governmental entity responsible for approval, permitting or regulating said vehicles.

*Mobile Residence* shall mean land uses for the temporary or permanent placement of Mobility Homes, RVs, Tiny Homes on Wheels, or Travel Trailers within predefined lots or spaces that have connections for communications, electric, water and wastewater. Mobile residential parks may have common amenities and building with recreation uses, laundry and park office.

*Mobility* shall mean the ability to move people and goods from an origin to a destination by multiple modes of travel in a timely (speed) manner.

*Mobility Fee* shall mean a monetary exaction imposed on new development or redevelopment that generates personal miles of travel above the current use of land to fund multimodal projects identified in a mobility plan.

*Mobility Fee Off-set* shall mean the equivalent amount of a mobility fee associated with an existing use of a building that is being redeveloped or where a change of occupancy or use is requested. The equivalent mobility fee shall be based on the current use of the building, or the most recent use of the building for a vacant building. Upon demolition of a building, offsets shall be available for up to five years from the date of demolition, unless otherwise provided for in a written agreement with the City or specified in an implementing ordinance.

*Mobility Plan* shall mean the plan adopted by the City of St. Augustine that identifies multimodal projects to meet the person miles of travel demands of new development activity.



*Mode* shall mean the choice of travel that a person undertakes and can include walking, jogging, running, bicycling, paddling, scooting, flying, driving a vehicle, riding a boat, transit, taxi or using a new mobility technology.

*Motor Vehicle & Boat Cleaning* shall mean a building, stalls, stations, or tunnels for the cleaning, detailing, polishing, washing, or waxing of motor vehicles or boats which fall under the description of ITE Trip Generation Manual Land Use Code Series 800 and 900. The fee is based on both the number of lanes and stalls.

*Motor Vehicle Charging or Fueling* shall mean the total number of vehicles that can be charged or fueled at one time (fueling positions). Increasingly, land uses such as superstores, (i.e., super Wal-Mart), variety stores, (i.e., Dollar General), and wholesale clubs (i.e., Costco) are also offering vehicle fueling with or with/out small convenience stores. Outside of Florida, several grocery store chains are also starting to sell fuel. The mobility fee rate per fueling position would be in addition to any mobility fee per square foot under the applicable retail land use with vehicle fueling. Motor vehicle charging stations that do not require a customer to pay for charging are exempt from payment of the mobility fee.

*Multimodal* shall mean multiple modes of travel including, but not limited to walking, bicycling, jogging, rollerblading, skating, scootering, riding transit, driving a golf cart, low speed electric vehicle or motor vehicle.

*Multimodal projects* shall mean improvements such as sidewalks, bike lanes, trails, paths, protected bike lanes, transit facilities, streetscape, landscape, roundabouts, raised medians, crosswalks, and high visibility crosswalks. Multimodal projects also include shared mobility programs and services, wayfinding, micromobility devices, programs and services, and microtransit vehicles and lanes. Improvements can include new or additional road travel lanes and turn lanes, complete and low speed streets, new or upgraded traffic signals, traffic synchronization, mobilization, maintenance of traffic, survey, geotechnical and engineering, utilities, construction, engineering and inspection, utility relocation, right-of-way, easements, stormwater facilities. Projects may also include the repayment of bonds, local match for federal, state and county funded projects, repayment of loans from the State of Florida Infrastructure Bank used to front-end the design and/or construction of multimodal improvements.

*Multimodal project expenses* shall mean expenditures for: (a) the repayment of principal and interest or any redemption premium for loans, advances, bonds, bond anticipation notes, and any other form of indebtedness then outstanding consistent with statutory allowances; (b) reasonable administrative and overhead expenses necessary or incidental to expanding and improving multimodal projects; (c) crosswalks, traffic control and crossing warning devices, landscape, trees, multimodal way finding, irrigation, hardscape, and lighting related to projects; (d) micromobility devices, programs and services, (e) transit circulators, facilities, programs, shuttles, services and vehicles; (f) reasonable expenses for engineering studies, stormwater reports, soil borings, tests,



surveys, construction plans, and legal and other professional advice or financial analysis relating to projects; (g) the acquisition of right-of-way and easements for the improvements, including the costs incurred in connection with the exercise of eminent domain; (h) the clearance and preparation of any site, including the demolition of structures on the site and relocation of utilities; (i) floodplain compensation, wetland mitigation and stormwater management facilities; (j) all expenses incidental to or connected with the issuance, sale, redemption, retirement, or purchase of bonds, bond anticipation notes, or other forms of indebtedness, including funding of any reserve, redemption, or other fund or account provided for in the ordinance or resolution authorizing such bonds, notes, or other form of indebtedness; (k) reasonable costs of design, engineering and construction, including mobilization, maintenance of traffic during construction and CEI (construction engineering and inspection) services of related projects, (l) city administration, implementation updates to the mobility plan and mobility fee, including any assessments, counts or studies needed for projects.

*Multi-Tenant Retail* shall mean entertainment, restaurants, retail, sales, or services provided in a single building, with two (2) or more separate distinct uses under different corporate ownership where no single use exceeds 75% of the total square footage of the building. This includes land uses under ITE Land Use Codes Series under 800 and 900 and Land Use Codes 445.

*New Development Activity* shall mean any new residential and commercial construction, any new land development or site preparation activity, any new construction of buildings or structures, any modification, reconstruction, redevelopment, or upgrade of buildings or structures, any change of use of a building, land, or structure, and any special exception approval or special use permit that results in an increase in person travel demand above the existing use of property.

*Non-Residential Square Feet* shall mean the sum of the gross floor area (in square feet) of the area of each floor level under cover, including cellars, basements, mezzanines, penthouses, corridors, lobbies, stores, and offices, that are within the principal outside faces of exterior walls, not including architectural setbacks or projections. Included are all areas that have floor surfaces with clear standing head room (six feet six inches, minimum) and are used as part of primary use of the property of their use. If an area within or adjacent to the principal outside faces of the exterior walls is not enclosed, such as outdoor restaurant seating, areas used for storage of goods and materials, or merchandise display, and is determined to be a part of the primary use of property, this gross floor area is considered part of the overall square footage of the building. Areas for parking, circulation, ingress, egress, buffers, conservation, walkways, landscape, stormwater management, and easements or areas granted for transit stops or multimodal parking are not included in the calculation of square feet.

*Office* shall mean banks without drive-thru, financial services without drive-thru, general office, and professional activities primarily involving the provision of professional or skilled services, including but not limited to accounting, legal, real estate, insurance, financial, engineering, architecture, accounting, and technology.



*Office Uses* shall mean those businesses which provide professional services to individuals, businesses, or groups and which include those uses in the ITE Trip Generation Manual under Land Use Code Series 600 and 700 and includes Land Use Codes 540, 550, 911 and 912. Land Use Code 620 is included under institutional uses.

*Off-site improvement* shall mean improvements located outside of the boundaries of the parcel proposed for development. Access improvements required to provide ingress and egress to the development parcel, which may include rights-of-way, easements, paving of adjacent or connecting roadways, turn lanes and deceleration/acceleration lanes, sidewalks, bike lanes, trails, paths, transit stops along with required traffic control devices, signage, and markings, and drainage and utilities, shall be considered on-site improvements.

*Outdoor Commercial Recreation* shall mean outdoor recreational activity including land uses with miniature golf, batting cages, video arcade, bumper boats, go-carts, golf driving ranges, tennis, racquet or basketball courts, soccer, baseball and softball fields, paintball, skating, cycling or biking that require paid admittance, membership or some other type of fee for use. Buildings for refreshments, bathrooms, changing and retail may be included. The fee shall be based upon the total acreage of the facility for active uses outside of buildings and all buildings used to carry out a primary function of the land use activity. Areas for parking, buffers and stormwater that are not active features of the land use are excluded from the fee acreage. The use would generally fall under the ITE Land Use Code 400 series.

*Overnight Lodging* shall mean places of accommodations, such as bed and breakfast, inns, motels, hotels and resorts that provide places for sleeping and bathing and may include supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention facilities, and limited recreational facilities (pool, fitness room) intended for primary use by guest and which include those uses specified in the ITE Trip Generation Manual under the Land Use Code Series 300.

*Person Miles of Capacity (PMC)* shall mean the number of persons “capacity” that can be accommodated, at a determined standard, on a facility while walking, bicycling, riding transit, driving or using a mobility assisted device over a defined distance.

*Person Miles of Travel (PMT)* shall mean the number of miles traveled by each person on a trip to account for all miles traveled by, but not limited to, motor vehicle, transit, walking, bicycling or some other form of person powered, electric powered or gasoline powered device.

*Person Travel Demand (PTD)* shall mean travel demand from new development and redevelopment which results in an increase in travel over the existing use of land based on trip generation, pass-by trips, person trip factor, person trip length, person miles of travel, limited access factor, and origin and destination factor for the uses established in the mobility fee schedule.



*Person Trip* shall mean a trip by one person using one or more modes of travel including, but not limited to, driving a motor vehicle or low speed electric vehicle, riding transit, walking, bicycling or form of person powered, electric powered or gasoline powered device.

*Pharmacy drive-thru* shall mean the drive-thru lanes associated with a pharmacy. The number of drive-thru lanes will be based on the number of lanes present when an individual places or pick-up a prescription or item. The fee per drive-thru is in addition to the retail fee per square foot for the pharmacy building.

*Private Education* shall mean a building used for pre-school, private school, or day care. Private school (Pre-K to 12) shall mean a building or buildings in which students are educated by a non-governmental entity with grades ranging from pre-kindergarten to 12th grade. Private schools do not include charter schools, which are exempt from local government fees per Florida Statute. Day care shall mean a facility where care for young children or for older adults is provided, normally during the daytime hours. Day care facilities generally include classrooms, offices, eating areas and playgrounds.

*Quick Service Restaurant Drive-Thru* shall mean a quick service restaurant where an order for food is placed or a pick-up/delivery lane where an order is picked-up by either a customer that placed an online order or a delivery service. Quick service restaurants are establishments serving beverages, food, or both with higher turnover, quick service, and may feature either counter service or selection of items from a counter and would fall under the descriptions of ITE Trip Generation Manual Land Use Codes 930, 933, 934, 935, 936, 937, and 938. The vehicle will proceed to one or more common pick-up windows, lockers, stations, or functional equivalent after the order has been placed. Quick service restaurant with drive-thru maybe located in multi-tenant retail or free-standing retail buildings. This use also includes any quick service restaurants that do not offer indoor seating and are intended to primarily be served by vehicle delivery services or pick-up or drive-thru only orders placed online. These uses may provide a walk-up order window.

*Quality of Service (QOS)* shall mean a quantitative stratification of the quality of service of personal mobility stratified into six letter grade levels, with “A” describing the highest quality and “F” describing the lowest quality; a discrete stratification of a quality-of-service continuum.

*Recreation Uses* shall mean those public or quasi-public uses that serve a community's social, cultural, fitness, entertainment, and recreational needs, which include applicable land uses specified in the ITE Trip Generation Manual under Land Use Code Series 400 and 500.

*Residential Uses* shall mean a dwelling unit and shall include those uses specified in the ITE Trip Generation Manual under the Land Use Code Series 200.

*Residential* shall mean a dwelling unit and shall include those uses specified in the ITE Trip Generation Manual under the Land Use Code Series 200, except for Land Use Codes 253, 254, and 255. Residential includes tiny homes, accessory dwelling units, and dormitories.



*Residential square feet* shall be the sum of the area (in square feet) of each dwelling unit measured from the exterior surface of the exterior walls or walls adjoining public spaces such as multifamily or dormitory hallways, or the centerline of common walls shared with other dwelling units. Square feet include all livable, habitable, and temperature controlled enclosed spaces (enclosed by doors, windows, or walls). This square footage does not include unconditioned garages or unenclosed areas under roof. For multifamily and dormitory uses, common hallways, lobbies, leasing offices, and residential amenities are not included in the square feet calculation, unless that space is leased to a third-party use and provides drinks, food, goods, or services to the public or paid memberships available to individuals that do not reside in a dwelling unit.

*Residential or lodging uses* means a dwelling unit or room in overnight accommodations or mobile home or RV park and shall include those uses specified in the ITE Trip Generation Manual under the Land Use Code Series 200 and 300 and land use code 416. Land use codes 253, 254, and 255 are considered institutional uses.

*Service Standard* shall mean the adopted or desired quality or level of service for a bicycle facility, pedestrian facility, roadway, shared-use multimodal facility, or transit.

*Shell building* shall mean the foundational and structural elements that separate interior and exterior space and includes the roof, walls, windows, doors, mechanical systems, and rough plumbing and electric. Common areas are typically finished. Interior spaces are designed to be finished by the tenant with wall coverings, ceiling, flooring, lighting, electrical and plumbing finishes, and furnishings. The floor may or may not be finishing with concrete to allow for flexibility in the location of plumbing service lines.

*Streetscape* shall mean hardscape elements such as pavers, benches, lighting, trash and recycling receptacles, fountains, seating, shade structure, crosswalks, landscape elements such as canopy and understory trees, shrubs, bushes, grasses and flowers, green infrastructure and architectural structures and projections that provide shade and protection from various weather conditions.

*Vehicle Miles of Travel (VMT)* shall mean a unit to measure vehicle travel made by a private motor vehicle, such as an automobile, van, pickup truck, or motorcycle where each mile traveled is counted as one vehicle mile regardless of the number of persons in the vehicle. VMT is calculated by multiplying the length of a road segment by the total number of vehicles on that road segment.

*Vehicle Trip* shall mean a trip by one person driving a motor vehicle or a motorcycle.



## CONCLUSION

The City of St. Augustine's mobility fee is based upon the multimodal projects included in the Mobility Plan. The Mobility Plan is a 20-year vision for moving people and providing choices through expansion of the multimodal transportation network by constructing bike lanes, multimodal ways, sidewalks, and trails. The Mobility Plan also proposes the conversion of existing streets to complete streets and low speed streets to encourage mobility through walking, bicycling, and riding microtransit circulators. The Mobility Plan also identifies regional improvements such as water taxis, multimodal connections and future rail service to accommodate the growth in regional travel by means other than just widening roads. The City will continue to work with the County, FDOT, adjacent Counties and the Northeast Florida TPO in a cooperative manner to improve transportation mobility within and surrounding the City.

A mobility fee is a streamlined, equitable way for new development to continue to mitigate its impact to the multimodal transportation system. The Mobility Plan projects are based on the projected increase in person miles of travel from new development activity within and around the City; consistent with the **"needs"** requirement of the dual rational nexus test. The mobility fee is based on the projected increase in person miles of capacity (PMC) provided by the multimodal projects identified in the Mobility Plan. These multimodal projects meet the demands for new person capacity attributable to new development activity as required by Florida Statute.

The implementation of a Citywide Mobility Fee Benefit District, where a mobility fee paid by new development activity is to be expended to fund the multimodal projects identified in the Mobility Plan, thus ensuring that the mobility fee will meet the **"benefits"** requirement of the dual rational nexus test. The City's mobility fee will be the only **"fee"** assessed on new development activity within the City to offset the impact on the City's multimodal transportation system.

The City of St. Augustine will determine how mobility fee revenue is allocated through its annual Capital Improvements Program. Mobility fee revenues may be expended on multimodal projects identified in the Mobility Plan and within the Citywide Mobility Fee Benefit District, so long as the multimodal projects are included in the City's Capital Improvements Program. As new mobility technologies and shared mobility services evolve, the City may consider future updates to its Mobility Plan and Comprehensive Plan to promote the movement of people through multiple modes of travel and new technology. The City will continue to utilize innovative parking management strategies to create a park-once environment on the periphery of the Historic Districts and encourage visitors to utilize multimodal transportation to explore the City.



It is recommended that the City move forward with adoption of the mobility fee based on the Mobility Plan. If the City desires to lower the fee, then it should consider including potential available funding sources to lower the fee, as opposed to an arbitrary reduction of the mobility fee or a phased-in mobility fee. It is also recommended that the City consider incorporating an annual inflation index in the mobility fee ordinance so future updates will feature smaller increases in the mobility fee rate. This is especially important given the recent changes to Florida Statute Section 163.31801 that limit future increases unless there is a finding of extraordinary circumstances. Since the mobility fee is new and is not replacing an existing fee, the City can adopt the mobility fee at its fully calculated rate and index the mobility fee to inflation, so the size of future increases is lower due to the mobility fee being adjusted annually for inflation.

To ensure that the Mobility Plan and mobility fee is consistent with the Statutory requirement that fees be based on the most recent and localized date, the Mobility Plan and mobility fee should be updated no later than every five (5) years. Florida Statute requires that mobility fees reflect the most recent and localized data. There is the potential that there may be punitive measures in future statutory amendments for local governments that do not update their fees, such as the potential suspension of fees that are out of date. Thus, it is recommended that the City budget for updates three (3) years from the date of adoption and begin the update no later than four (4) years from the date of mobility fee adoption.

The City should consider development of an administrative service charge to cover the cost of administering, implementing, and updating the mobility fee. Florida Statute requires any administrative service charges not exceed the cost to administer the mobility fee program. The service charges can also address request for special studies, developer agreements, mobility fee offsets and mobility fee credits. The City may also wish to consider adoption of administrative procedures to address day-to-day implementation of the mobility fee program.

The person miles of travel for each use included in the mobility fee schedule meet the “rough proportionality test” established through case law and Florida Statute 163.31801. The new growth evaluation demonstrates that new development is not being assessed more than its fair share of the cost of the Mobility Plan projects. Payment of the mobility fee addresses full mitigation of the person travel demand generated by new development activity within the City. The Mobility Plan and the calculated mobility fee are consistent with the requirements of Florida Statutes 163.3180 and 163.319801 and meet all legal requirements.



## **Map A**

### **Streets Plan**





CITY OF  
**ST AUGUSTINE**  
— EST. 1685 —

The diagram illustrates three types of streets from left to right:

- COMPLETE STREETS:** Shows a wide street with a dedicated bicycle lane on the left, a car lane in the center, and a scooter lane on the right. Icons for a person walking, a person on a bicycle, and a car are shown.
- SHARED STREETS:** Shows a street where all users share the space. Icons for a person walking, a person on a bicycle, and a car are shown.
- NEW ROAD / ROAD WIDENING:** Shows a simple road with a car lane. A car icon is shown.



**COMPLETE STREETS**

## CASTILLO DRIVE IMPROVEMENT

**COMPLETE STREETS**  


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## **Map B**

### **Walking and Bicycling Plan**



FEBRUARY 2022



**2040 ST. AUGUSTINE MOBILITY PLAN:  
WALKING AND BICYCLING PLAN**



**PROTECTED BIKE LANE (6'-8' WIDE)**  
SKATING, SEDWAY, BICYCLE, SCOOTER, E-BICYCLE,  
E-SCOOTER, MICROMOBILITY DEVICES



**TRAIL (8'-12' WIDE)**  
WALKING, SKATING, BICYCLE, SCOOTER  
(ELECTRIC-POWERED DEVICES PROHIBITED;  
MOTORIZED/ELECTRIC DEVICES FOR MOBILITY-  
IMPAIRED ALLOWED)

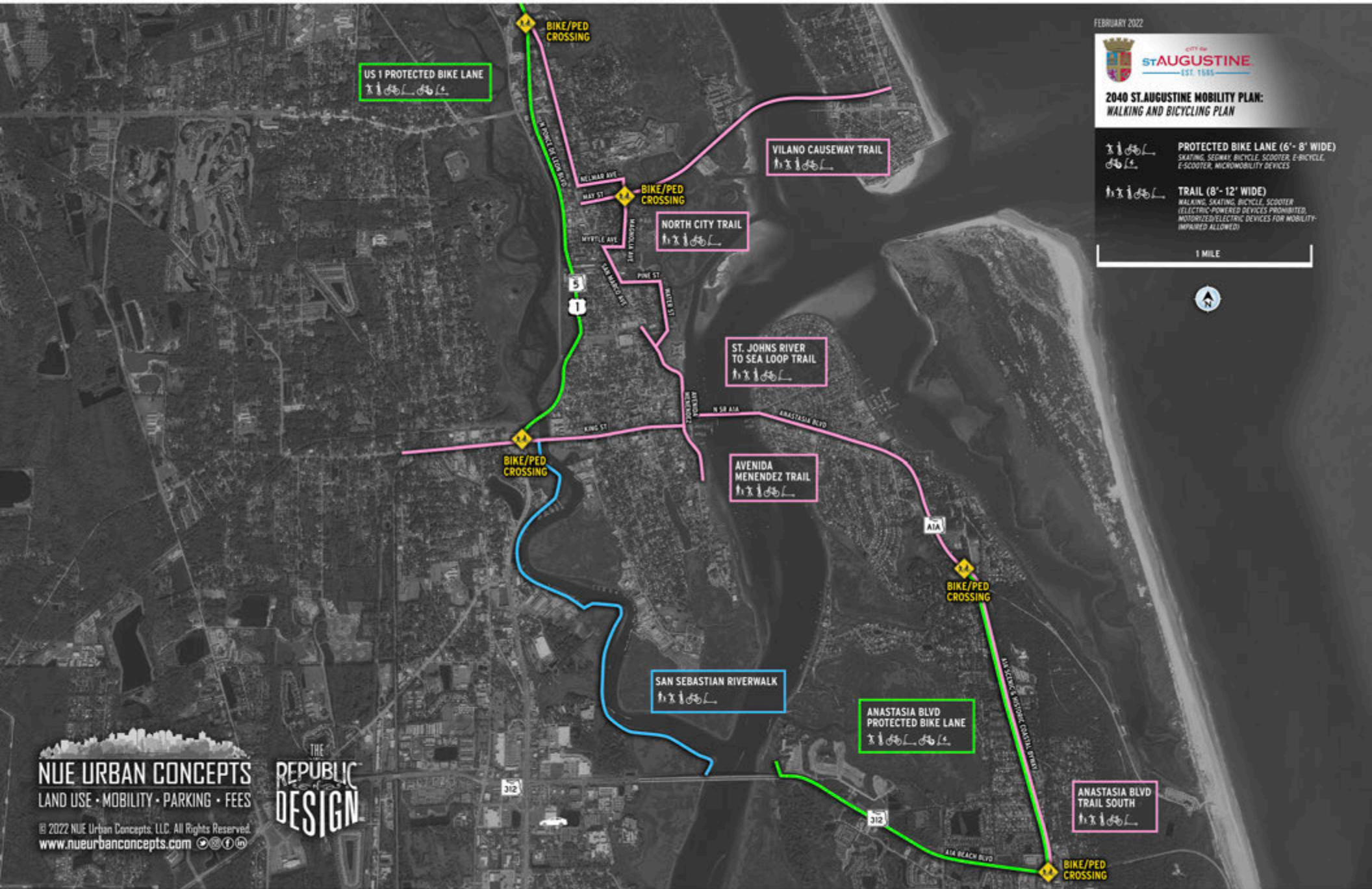
1 MILE



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## **Map C**

### **Multimodal Ways Plan**



FEBRUARY 2022



# 2040 ST.AUGUSTINE MOBILITY PLAN: MULTIMODAL WAYS PLAN

- |  |  |
|--|--|
| <span style="color: red;">●</span> FUTURE AREAS FOR PARKING GARAGES                    | <span style="color: yellow;">●</span> EXISTING PARKING GARAGES |
| 1 NORTH GARAGE<br>2 WEST GARAGE<br>3 EAST GARAGE<br>4 SOUTH GARAGE<br>5 CENTRAL GARAGE | 6 HISTORIC DOWNTOWN GARAGE<br>7 FLAGLER COLLEGE PARKING GARAGE |
| <span style="color: blue;">●</span> TRANSIT ORIENTED DEVELOPMENT (TOD)                 | <span style="color: purple;">●</span> PARK & RIDE              |
| 8 FLORIDA EAST COAST RAILROAD (FEC)<br>9 BROUDY PROPERTY                               | 10 PARK AND RIDE FACILITY                                      |

MULTIMODAL WAY (8' - 9' WIDE)  
SEGWAY, E-BICYCLE, E-SCOOTER, GOLF CARTS, ELECTRIC MICROMOBILITY DEVICES, AUTONOMOUS TRANSIT SHUTTLES, LOW SPEED VEHICLES

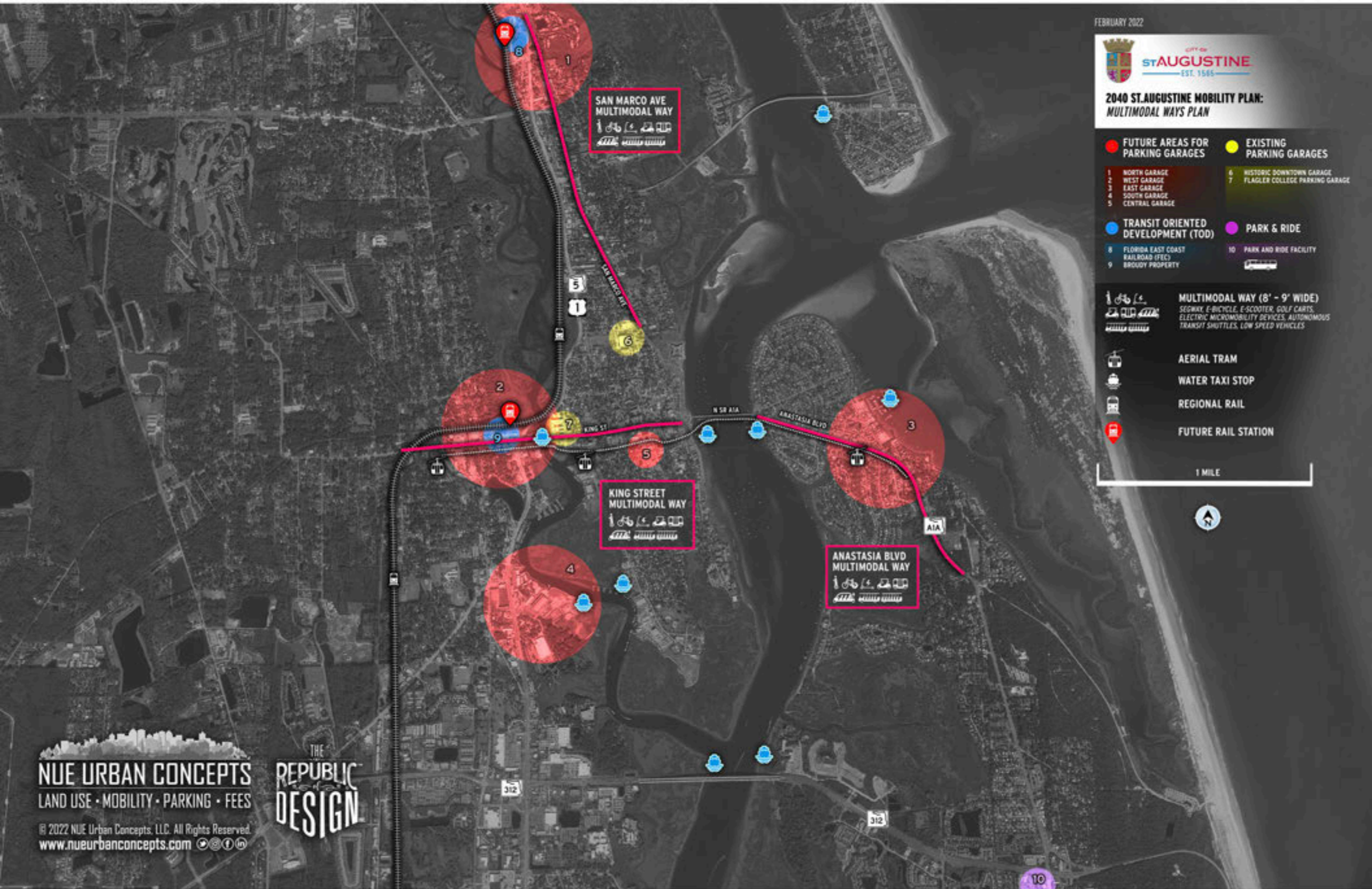
- AERIAL TRAM
- WATER TAXI STOP
- REGIONAL RAIL
- FUTURE RAIL STATION

1 MILE



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## **Map D**

### **Transit Circulator Plan**



FEBRUARY 2022



**2040 ST.AUGUSTINE MOBILITY PLAN:  
TRANSIT CIRCULATOR PLAN**

- |  |  |
|--|--|
| <b>FUTURE AREAS FOR<br/>PARKING GARAGES</b>  | <b>EXISTING<br/>PARKING GARAGES</b>                            |
| 1 NORTH GARAGE<br>2 WEST GARAGE<br>3 EAST GARAGE<br>4 SOUTH GARAGE<br>5 CENTRAL GARAGE | 6 HISTORIC DOWNTOWN GARAGE<br>7 FLAGLER COLLEGE PARKING GARAGE |
| <b>TRANSIT ORIENTED<br/>DEVELOPMENT (TOD)</b>  | <b>PARK &amp; RIDE</b>   |
| 8 FLORIDA EAST COAST<br>RAILROAD (FEC)<br>9 BROUDY PROPERTY                            | 10 PARK AND RIDE FACILITY                                      |

- |                     |
|---------------------|
| AERIAL TRAM         |
| WATER TAXI STOP     |
| REGIONAL RAIL       |
| FUTURE RAIL STATION |

1 MILE



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DESIGN



## **Map E**

### **Mobility Fee Assessment Area & Benefit District**





**2040 ST.AUGUSTINE MOBILITY PLAN:**  
*MOBILITY FEE ASSESSMENT AREA & BENEFIT DISTRICT*

 CITY LIMITS

1 MILE



  
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## **Appendix A**

### **Quality of Service (QOS) Evaluation**



Appendix A: City of St. Augustine Street Quality of Service (QOS)					
Road	From	To	Posted Speed Limit	Street QOS	Length
King Street	City Limits	Palmer Street	25	C	0.21
King Street	Palmer Street	Ponce De Leon Blvd (US 1)	25	C	0.25
King Street	Ponce De Leon Blvd (US 1)	Riberia Street	25	C	0.38
King Street	Riberia Street	Cordova Street	25	C	0.27
King Street	Cordova Street	Avenida Menendez	25	C	0.18
Bridge of Lions (A1A)	Avenida Menendez	Dolphin Drive	30	D	0.45
Anastasia Blvd (A1A)	Dolphin Drive	Arredondo Avenue	30	D	0.29
Anastasia Blvd (A1A)	Arredondo Avenue	Comares Avenue	40	E	0.36
Anastasia Blvd (A1A)	Comares Avenue	SR 312	40	E	2.18
A1A Beach Blvd	Anastasia Blvd (A1A)	Pope Road	45	E	1.00
Dixie Hwy (US 1)	SR 312	SR 207	45	E	0.97
Ponce De Leon Blvd (US 1)	SR 207	Lewis Blvd	45	E	0.42
Ponce De Leon Blvd (US 1)	Lewis Blvd	King Street	35	E	0.28
Ponce De Leon Blvd (US 1)	King Street	Castillo Drive	35	E	0.67
Ponce De Leon Blvd (US 1)	Castillo Drive	May Street	40	E	0.69
Ponce De Leon Blvd (US 1)	May Street	SR 16	40	E	0.57
Ponce De Leon Blvd (US 1)	SR 16	San Marco Avenue	45	E	0.54
Ponce De Leon Blvd (US 1)	San Marco Avenue	Lewis Speedway	45	E	1.25
Avenida Menendez (A1A)	St. Francis Street	King St	20	B	0.31
Avenida Menendez (A1A)	King Street	Cuna Street	25	C	0.25
Castillo Drive (A1A)	Cuna Street	San Marco Avenue	25	C	0.33
Castillo Drive	San Marco Avenue	Ponce De Leon Blvd (US 1)	25	C	0.31
San Marco Avenue (A1A)	Castillo Drive	May Street	25	C	0.77
San Marco Avenue	May Street	Ponce De Leon Blvd (US 1)	30	D	1.06
Cordova Street	St. George Street	King Street	20	B	0.57
Cordova Street	King Street	Orange Street	20	B	0.39
Bridge Street	Cordova Street	Riberia Street	20	B	0.53
South Street	Marine Street	Riberia Street	20	B	0.39
Orange Street	Castillo Drive (A1A)	Ponce De Leon Blvd (US 1)	20	B	0.46
ML King Avenue	South Street	King Street	20	B	0.68
Riberia Street	South Street	King Street	25	C	0.72
Riberia Street	King Street	Orange Street	20	B	0.41
Riberia Street	Orange Street	Castillo Drive (A1A)	25	C	0.12
May Street (A1A)	San Marco Avenue (A1A)	Magnolia Avenue	30	D	0.23
May Street (A1A)	Magnolia Avenue	Coastal Highway (A1A)	40 / 45	E	1.60
SR 312	Dixie Hwy (US 1)	Matanzas River	45	E	1.00
SR 312	Matanzas River	Anastasia Blvd (A1A)	50	E	1.60



Appendix A: City of St. Augustine Street Quality of Service (QOS)					
Road	From	To	Posted Speed Limit	Street QOS	Length
SR 16	Lewis Speedway	Ponce De Leon Blvd (US 1)	35	E	0.40
Picolata Drive	Ponce De Leon Blvd (US 1)	San Marco Avenue	35	E	0.12
W. San Carlos Ave	San Marco Avenue	Ponce De Leon Blvd (US 1)	25	C	0.10
Old Moultrie Road	SR 312	Old Dixie Highway	35	E	0.69
Dixie Highway	Old Dixie Highway	SR 207	35	E	0.25
Dixie Highway	SR 207	Pellicer Lane	25	C	0.59
Pellicer Lane	Dixie Highway	King Street	25	C	0.13
Palmer Street	King Street	Evergreen Avenue	25	C	0.26
Evergreen Avenue	Palmer Street	Masters Drive	25	C	0.05
Masters Drive	Evergreen Avenue	SR 16	25	C	1.44
Source: City of St. Augustine. Prepared by NUE Urban Concepts, 2022					

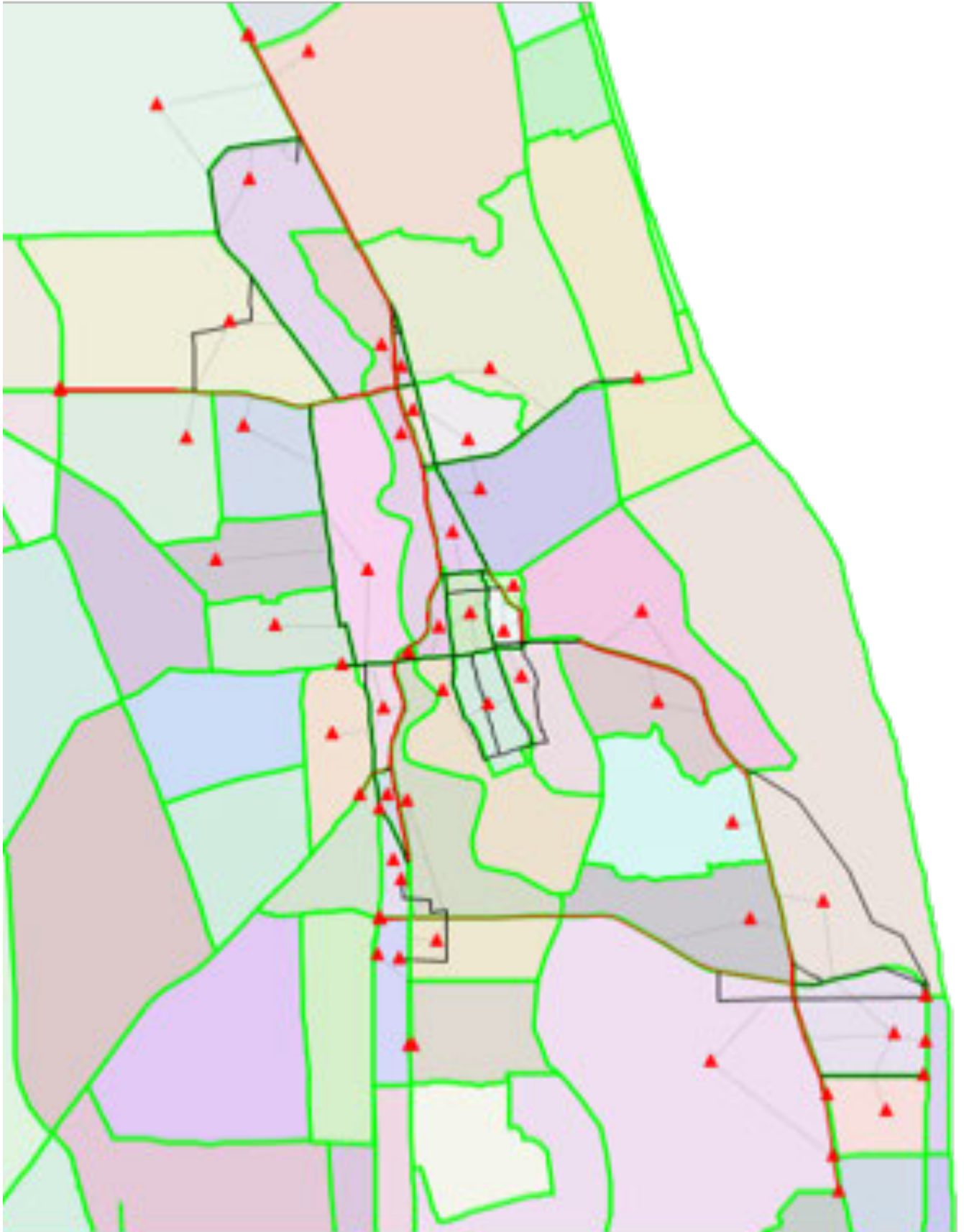


## **Appendix B**

### **Traffic Analysis Zones (TAZs) & Regional Model Network**



**APPENDIX B: ST. AUGUSTINE  
TRAFFIC ANALAYSIS ZONES (TAZs) & MODEL NETWORK**





## **Appendix C**

### **2017 National Household Travel Survey Data**



**Appendix C: 2017 National Household Travel Survey Data for Florida**

Trip Purpose	Trip Length	Number of Trips	Average Trip Length	Number of Persons	Person Trip Rate	Person Miles of Travel (PMT)	PMT Rate	Vehicle Miles of Travel (VMT)	Average Trip Length	Number of Vehicles	# of Person per Vehicle	Vehicle Occupancy
Buy Goods	2,873.55	957.00	3.00	1,649	1.72	4,951.40	1.74	2,847.37	3.11	917	1,603	1.75
Buy Meals	1,639.97	508.00	3.23	1,132	2.23	3,751.52	2.32	1,617.02	3.55	455	1,000	2.20
Buy Services	481.82	154.00	3.13	267	1.73	795.87	1.65	480.95	3.19	151	263	1.74
Family Care	27.14	8.00	3.39	19	2.38	73.05	2.85	25.67	3.67	7	17	2.43
Entertainment	574.78	175.00	3.28	405	2.31	1,331.73	2.42	549.44	3.90	141	321	2.28
Errand / Library / PO	365.80	161.00	2.27	237	1.47	521.09	1.46	355.80	2.58	138	211	1.53
Exercise	547.95	234.00	2.34	374	1.60	834.82	1.80	462.84	3.53	131	203	1.55
Home	6,410.86	2,067.00	3.10	3,801	1.84	12,512.18	2.04	6,135.43	3.53	1,737	3,334	1.92
Medical	397.13	97.00	4.09	148	1.53	623.71	1.58	395.92	4.17	95	146	1.54
Religious	501.36	127.00	3.95	279	2.20	1,143.73	2.30	497.76	4.18	119	268	2.25
School	417.15	121.00	3.45	256	2.12	872.79	2.20	396.80	3.71	107	242	2.26
Work	2,481.70	615.00	4.04	766	1.25	2,958.97	1.21	2,450.82	4.24	578	710	1.23
Total	16,719.21	5,224.00	3.20	9,333	1.79	30,370.87	1.87	16,215.82	3.54	4,576	8,318	1.82

Note: 2017 National Household Travel Survey Data for the State of Florida based on trips of 10 miles or less in length



## **Appendix D**

### **Florida Department of Transportation (FDOT) Generalized Service Volumes**



**Generalized Annual Average Daily Volumes for Florida's  
Urbanized Areas**

**TABLE 1**

12/18/12

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Core Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	16,800	17,700	**	4	47,400	64,000	77,900	84,600	
4	Divided	*	37,900	39,800	**	6	69,900	95,200	116,600	130,600	
6	Divided	*	58,400	59,900	**	8	92,500	126,400	154,300	176,600	
8	Divided	*	78,800	80,100	**	10	115,100	159,700	194,500	222,700	
						12	162,400	216,700	256,600	268,900	
Class II (35 mph or slower posted speed limit)						Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	7,300	14,800	15,600	4	45,800	61,500	74,400	79,900	
4	Divided	*	14,500	32,400	33,800	6	68,100	93,000	111,800	123,300	
6	Divided	*	23,300	50,000	50,900	8	91,500	123,500	148,700	166,800	
8	Divided	*	32,000	67,300	68,100	10	114,800	156,000	187,100	210,300	
Non-State Signalized Roadway Adjustments						Freeway Adjustments					
(Alter corresponding state volumes by the indicated percent.)						Auxiliary Lanes					
Non-State Signalized Roadways						Present in Both Directions					
						+ 20,000					
Non-State Signalized Roadways						Ramp Metering					
						+ 5%					
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	B	C	D	E
2	Divided	Yes	No	+5%		2	Undivided	8,600	17,000	24,200	33,300
2	Undivided	No	No	-20%		4	Divided	36,700	51,800	65,600	72,600
Multi	Undivided	Yes	No	-5%		6	Divided	55,000	77,700	98,300	108,800
Multi	Undivided	No	No	-25%							
—	—	—	Yes	+ 5%							
One-Way Facility Adjustment						Uninterrupted Flow Highway Adjustments					
Multiply the corresponding two-directional volumes in this table by 0.6						Lanes	Median	Exclusive left lanes	Adjustment factors		
						2	Divided	Yes	+5%		
						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		
BICYCLE MODE <sup>2</sup>						<sup>1</sup> Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.  <sup>2</sup> Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.  <sup>3</sup> Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.  * Cannot be achieved using table input value defaults.  ** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)											
<b>Paved Shoulder/Bicycle</b>											
Lane Coverage	B	C	D	E							
0-49%	*	2,900	7,600	19,700							
50-84%	2,100	6,700	19,700	>19,700							
85-100%	9,300	19,700	>19,700	**							
PEDESTRIAN MODE <sup>2</sup>						<sup>1</sup> Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.  <sup>2</sup> Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.  <sup>3</sup> Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.  * Cannot be achieved using table input value defaults.  ** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)											
<b>Sidewalk Coverage</b>											
B	C	D	E								
0-49%	*	*	2,800	9,500							
50-84%	*	1,600	8,700	15,800							
85-100%	3,800	10,700	17,400	>19,700							
BUS MODE (Scheduled Fixed Route) <sup>3</sup>						<sup>1</sup> Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.  <sup>2</sup> Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.  <sup>3</sup> Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.  * Cannot be achieved using table input value defaults.  ** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.					
(Buses in peak hour in peak direction)											
<b>Sidewalk Coverage</b>											
B	C	D	E								
0-84%	> 5	≥ 4	≥ 3	≥ 2							
85-100%	> 4	≥ 3	≥ 2	≥ 1							

Source:  
Florida Department of Transportation  
Systems Planning Office  
[www.dot.state.fl.us/planning/systems/sm/los/default.shtm](http://www.dot.state.fl.us/planning/systems/sm/los/default.shtm)

Source:  
Florida Department of Transportation  
Systems Planning Office  
[www.dot.state.fl.us/planning/systems/sm/los/default.shtm](http://www.dot.state.fl.us/planning/systems/sm/los/default.shtm)



**TABLE 1**  
(continued)

**Generalized Annual Average Daily Volumes for Florida's Urbanized Areas**

12/18/12

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities				Interrupted Flow Facilities					
					State Arterials				Class I	
	Freeways	Core Freeways	Highways		Class I		Class II		Bicycle	Pedestrian
ROADWAY CHARACTERISTICS										
Area type (u,lu)	lu	lu	u	u	u	u	u	u	u	u
Number of through lanes (both dir.)	4-10	4-12	2	4-6	2	4-8	2	4-8	4	4
Posted speed (mph)	70	65	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	70	55	55	50	55	35	35	50	50
Auxiliary Lanes (n,y)	n	n								
Median (n, nr, r)			n	r	n	r	n	r	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone			80							
Exclusive left turn lane impact (n, y)			[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)					n	n	n	n	n	n
Facility length (mi)	4	4	5	5	2	2	1.9	1.8	2	2
Number of basic segments	4	4								
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.090	0.085	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.547	0.547	0.550	0.550	0.550	0.560	0.565	0.560	0.565	0.565
Peak hour factor (PHF)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)			1,700	2,100	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	4.0	4.0	2.0	2.0	1.0	1.0	1.0	1.0	2.5	2.0
Local adjustment factor	0.91	0.91	0.97	0.98						
% left turns					12	12	12	12	12	12
% right turns					12	12	12	12	12	12
CONTROL CHARACTERISTICS										
Number of signals					4	4	10	10	4	6
Arrival type (1-6)					3	3	4	4	4	4
Signal type (a, c, p)					c	c	c	c	c	c
Cycle length (C)					120	150	120	120	120	120
Effective green ratio (g/C)					0.44	0.45	0.44	0.44	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)									n, 50%, y	n
Outside lane width (n, t, w)									t	t
Pavement condition (d, t, u)									t	
On-street parking (n, y)										
Sidewalk (n, y)										n, 50%, y
Sidewalk/roadway separation(a, t, w)										t
Sidewalk protective barrier (n, y)										n
LEVEL OF SERVICE THRESHOLDS										
Level of Service	Freeways	Highways		Arterials			Bicycle	Ped	Bus	
	Density	Two-Lane	Multilane	Class I		Class II	Score	Score	Buses/hr.	
		%ffs	Density	ats		ats				
B	≤ 17	> 83.3	≤ 17	> 31 mph		> 22 mph	≤ 2.75	≤ 2.75	≤ 6	
C	≤ 24	> 75.0	≤ 24	> 23 mph		> 17 mph	≤ 3.50	≤ 3.50	≤ 4	
D	≤ 31	> 66.7	≤ 31	> 18 mph		> 13 mph	≤ 4.25	≤ 4.25	< 3	
E	≤ 39	> 58.3	≤ 35	> 15 mph		> 10 mph	≤ 5.00	≤ 5.00	< 2	

% ffs = Percent free flow speed    ats = Average travel speed



## **Appendix E**

### **Mobility Plan Multimodal Projects**



Appendix E: St. Augustine Mobility Plan Projects									
ID	Project	From	To	Length (Miles)	Project Type	Project Description	Time Frame	Cost	Capacity
1	King Street	Avenida Menendez (A1A)	N Rodriguez Street	1.45	Multimodal	Multimodal Way	2020-2025	\$ 1,450,000	24,360
2	Avenida Menendez (A1A)	King Street	W Castillo Drive	0.60	Multimodal	Trail	2020-2025	\$ 300,000	7,200
3	Avenida Menendez (A1A)	King Street	St. Francis Street	0.30	Multimodal	Trail	2020-2025	\$ 150,000	3,600
4	Vilano Causeway / May Street	San Marco Avenue (A1A)	Coastal Highway (A1A)	1.85	Multimodal	Trail	2020-2025	\$ 925,000	22,200
5	North City Trail	S Castillo Dr (A1A)	May Street (A1A)	1.20	Multimodal	Trail	2020-2025	\$ 600,000	14,400
6	Bridge of Lions	Avenida Menendez (A1A)	N St. Augustine Blvd	0.40	Multimodal	Trail	2020-2025	\$ 200,000	4,800
7	Cuna Street	Avenida Menendez (A1A)	Charlotte Street	0.05	Multimodal	Shared Street	2020-2025	\$ 290,400	1,800
8	Cuna Street	Charlotte Street	Cordova Street	0.20	Multimodal	Shared Street	2020-2025	\$ 1,161,600	7,200
9	Hypolita Street	Avenida Menendez (A1A)	Charlotte Street	0.05	Multimodal	Shared Street	2020-2025	\$ 290,400	1,800
10	Spanish Street	Cuna Street	Orange Street	0.15	Multimodal	Shared Street	2020-2025	\$ 871,200	5,400
11	Anastasia Blvd (A1A)	Red Cox Rd	SR 312	1.46	Multimodal	Trail	2020-2025	\$ 730,000	17,520
12	North City Trail	May Street (A1A)	Rambla St	1.40	Multimodal	Trail	2020-2025	\$ 700,000	16,800
13	S Leonardi Street	King Street	South Dixie Highway	0.20	Multimodal	Shared Street	2020-2025	\$ 1,161,600	7,200
14	West Garage	Vicinity of Kings St, SR 207, & US 1: Subject to Further Analysis		1.25	Parking	+/- 750 Space Parking Garage	2020-2025	\$ 18,750,000	10,181
15	West Castillo Drive	San Marco Ave (A1A)	North Ponce De Leon Blvd (US 1)	0.31	Roadway	Widen to four lanes	2020-2025	\$ 2,325,000	10,230
16	Park & Ride	SR 312 @ Anastasia Blvd		3.75	Parking	+/- 125 Space Park & Ride Station	2020-2025	\$ 1,000,000	3,394
17	Multimodal Intersection Improvement	Anastasia Blvd @ Red Cox Road		n/a	Multimodal	Improve multimodal crossing	2020-2025	\$ 250,000	--
18	Water Taxi Docks	Various locations: Subject to Environmental and Historic Impact Assessment		5.00	Transit	Water Taxi Docks	2020-2040	\$ 2,250,000	10,000
19	Bike Share Program Expansion	Citywide		n/a	Multimodal	Bicycle Share	2020-2040	\$ 500,000	--
20	Multimodal Wayfinding Signs	Citywide		n/a	Multimodal	Wayfinding Plan	2020-2040	\$ 300,000	--
21	High Visibility Crosswalks	Citywide		n/a	Multimodal	Crosswalks	2020-2040	\$ 1,500,000	--
22	Intersection Improvements	Citywide		n/a	Roadway	Turn lanes and safety improvements	2020-2040	\$ 2,500,000	18,200
23	Parking Management Strategies	Citywide		n/a	Parking	Dynamic Parking	2020-2040	\$ 1,250,000	--
24	Sidewalk Improvements	Citywide		n/a	Multimodal	Improving sidewalks and filling gaps	2020-2040	\$ 1,000,000	9,600
25	Safety Improvements	Citywide		n/a	Roadway	Intersection Upgrades	2020-2040	\$ 1,250,000	--
26	Transit / Trolley Circulators	Connecting existing and future parking garages with +/- 10 Minute Headways with a Span of Service of 16 Hours and a Transit Vehicle Capacity of 10 persons running bi-directional routes (Route 1 = +/- 1.35 miles; Route 2 = +/- 1 mile; Route 3 = +/- 1.5 miles; Route 4 = +/- 2.2 miles; Route 5 = +/- 1.5 miles)		7.55	Transit	Five (5) Proposed transit / trolley routes	2020-2040	\$ 4,500,000	14,496
27	Multimodal Intersection Improvement	May Road @ Magnolia Blvd		n/a	Multimodal	Improve multimodal crossing	2025-2030	\$ 250,000	--
28	Anastasia Blvd (A1A)	N St. Augustine Blvd	Comares Avenue	0.68	Multimodal	Multimodal Way	2025-2030	\$ 680,000	11,424
29	Anastasia Blvd (A1A)	Comares Avenue	Red Cox Road	0.72	Multimodal	Multimodal Way	2025-2030	\$ 720,000	12,096



Appendix E: St. Augustine Mobility Plan Projects									
ID	Project	From	To	Length (Miles)	Project Type	Project Description	Time Frame	Cost	Capacity
30	Cathedral Place	Avenida Menendez (A1A)	Cordova Street	0.20	Multimodal	Shared Street	2025-2030	\$ 1,161,600	7,200
31	Charlotte Street	King Street	S Castillo Dr	0.27	Multimodal	Shared Street	2025-2030	\$ 1,568,160	9,720
32	Cordova Street	King Street	Orange Street / Clock Tower	0.40	Multimodal	Complete Street	2025-2030	\$ 200,000	1,440
33	North Ponce De Leon Blvd (US 1)	King Street	Charles Usinas Memorial Hwy (SR 16)	1.95	Multimodal	Protected Bike Lane	2025-2030	\$ 1,950,000	28,080
34	Orange Street	Avenida Menendez (A1A)	North Ponce De Leon Blvd (US 1)	0.45	Multimodal	Complete Street	2025-2030	\$ 225,000	1,620
35	Carrera Street	Cordova Street	North Ponce De Leon Blvd (US 1)	0.40	Multimodal	Complete Street	2025-2030	\$ 200,000	1,440
36	Granada Street	King Street	Bridge Street	0.20	Multimodal	Complete Street	2025-2030	\$ 100,000	720
37	Cordova Street	King Street	St. Francis Street	0.32	Multimodal	Complete Street	2025-2030	\$ 160,000	1,152
38	Cordova Street	St. Francis Street	St. George Street	0.25	Multimodal	Shared Street	2025-2030	\$ 1,452,000	9,000
39	St. George Street	Cordova Street	South Street	0.10	Multimodal	Shared Street	2025-2030	\$ 580,800	3,600
40	St. Francis Street	Avenida Menendez	Cordova Street	0.20	Multimodal	Shared Street	2025-2030	\$ 1,161,600	7,200
41	San Sebastian Riverwalk	King St	Ice Plant Road (Shipyards)	1.15	Multimodal	Riverwalk	2025-2030	\$ 8,050,000	27,600
42	South Dixie Highway / Pellicer Ln	King St	SR 207	0.75	Multimodal	Complete Street	2025-2030	\$ 375,000	2,700
43	Anastasia Blvd (A1A)	Red Cox Rd	SR 312	1.46	Multimodal	Protected Bike Lane	2025-2030	\$ 1,460,000	21,024
44	South Garage	Vicinity of South of SR 207, Ice Plant Road, & US 1: Subject to Further Analysis		2.50	Parking	+/- 500 Space Parking Garage	2025-2035	\$ 12,500,000	9,050
45	San Macro Avenue (A1A)	W Castillo Drive	May Street (A1A)	0.75	Multimodal	Multimodal Way	2025-2035	\$ 750,000	12,600
46	San Macro Avenue	May Street (A1A)	SR 16	0.55	Multimodal	Multimodal Way	2025-2035	\$ 550,000	9,240
47	San Marco Avenue	SR 16	Rambla Street	0.61	Multimodal	Multimodal Way	2025-2035	\$ 610,000	10,248
48	ML King Ave	King Street	South Street	0.70	Multimodal	Complete Street	2030-2035	\$ 350,000	2,520
49	Bridge Street	Avenida Menendez	Riberia Street	0.54	Multimodal	Complete Street	2030-2035	\$ 270,000	1,944
50	North Ponce De Leon Blvd (US 1)	Charles Usinas Memorial Hwy (SR 16)	San Sebastian View	1.15	Multimodal	Protected Bike Lane	2030-2035	\$ 1,150,000	16,560
51	East Garage	Vicinity of Anastasia Blvd, Comares Avenue, & Red Cox Drive: Subject to Further Analysis		1.50	Parking	+/- 250 Space Parking Garage	2030-2040	\$ 6,250,000	4,073
52	Old Moultrie Road	SR 207	SR 312	0.95	Multimodal	Complete Street	2035-2040	\$ 475,000	3,420
53	Masters Drive / Palmer Street	SR 16	King St	1.75	Multimodal	Complete Street	2035-2040	\$ 875,000	6,300
54	North Garage	Vicinity of Florida East Coast Rail, San Marco Ave, Ponce DeLeon Blvd: Subject to Further Analysis		3.00	Parking	+/- 500 Space Parking Garage	2035-2040	\$ 12,500,000	10,860
55	Dixie Highway (US 1)	San Sebastian View	Lewis Speedway	0.65	Multimodal	Protected Bike Lane	2035-2040	\$ 650,000	9,360
56	SR 312	Anastasia Blvd (A1A)	Matanzas River	1.50	Multimodal	Protected Bike Lane	2035-2040	\$ 1,500,000	21,600
57	San Sebastian Riverwalk	Ice Plant Road (Shipyards)	Matanzas River	1.25	Multimodal	Riverwalk	2035-2040	\$ 8,750,000	30,000
58	Regional Rail	Future regional rail service along existing FEC railroad		6	Regional Transit	Regional Rail	2035-2040	\$ 39,600,000	33,600
59	North San Sebastian Bridge	Charles Usinas Memorial Hwy (SR 16)	North Ponce De Leon Blvd (US 1)	0.75	Regional Road	New Multimodal Bridge	2040+	\$ 45,000,000	54,000



Appendix E: St. Augustine Mobility Plan Projects									
ID	Project	From	To	Length (Miles)	Project Type	Project Description	Time Frame	Cost	Capacity
60	SR 312	Sgt Tutten Drive	Lakeside Ave	0.75	Regional Road	Limited Access Facility (Flyover)	2040+	\$ 45,000,000	89,250
61	Aerial Tramway	East Parking Garage	West Parking Garage	2.00	Regional Transit	Aerial Tramway	2040+	\$ 25,000,000	46,080
62	SR 313 Extension	State Road 207	US Highway 1	TBD	Regional Road	Multi-lane Controlled Access Highway	2020 - 2040	TBD	TBD
<b>Total</b>				<b>63.57</b>	<b>Total cost attributable to mobility fee = \$67,541,860 (see note 1 below); Total capacity attributable to mobility fee = 473,496 (see note 2 below)</b>			<b>\$ 268,279,360</b>	<b>727,102</b>
<b>Note 1:</b> Total multimodal cost @ 100% = \$48,604,360; Total parking facility cost = \$52,250,000 (Mobility Fee Share @ 5% = \$2,612,500); Total road cost = \$8,325,000 (regional road share = \$2,250,000); Regional road cost = \$90,000,000 (Mobility Fee Share @ 5% of new multimodal bridge only = \$2,250,000); Total transit cost = \$8,000,000 (regional transit share = \$1,250,000); Regional transit cost = \$64,600,000 (Mobility Fee Share @ 5% of aerial tramway only = \$1,250,000);									
<b>Note 2:</b> Total multimodal capacity @ 100% = 413,688; Total parking capacity = 37,558 (Mobility Fee Share @ 5% = 1,878); Total road capacity = 31,130 (regional road share = 2,700); Regional road capacity = 125,250 (Mobility Fee Share @ 5% of new multimodal bridge only = 2,700); Total transit capacity = 26,800 (regional transit share = 2,304); Regional transit capacity = 79,680 (Mobility Fee Share @ 5% of aerial tramway only = 2,304);									
<b>Note 3:</b> Cost are based on data from FDOT, City of St. Augustine, and industry standards. Cost include design, right-of-way, inspection, utility relocations and landscape. Total per mile cost = \$500,000 for trails; \$250,000 for sidewalks; \$1,000,000 for protected bike lanes; \$200,000 for mid-block crossings; \$500,000 for complete streets; \$1,000,000 for multimodal ways; \$7,000,000 for riverwalk, and \$7,500,000 to widen road from 2 to 4 lanes. Total cost for shared streets is \$1,100 per linear for. Parking garage spaces are \$25,000 each. Water taxi docks are \$250,000 each. Microtransit vehicle cost are \$150,000 each and a total of 30 are proposed for the five transit circulator routes. Regional Rail cost are \$6,600,000 per mile based on projected cost from the North Florida TPO total rail cost between Jacksonville and St. Augustine (\$250 million for 38 miles). New bridge and flyover estimated at \$60,000,000 per mile based on recent bridge cost in Florida. Aerial tramways based on cost of \$12,500,000 per mile based on cost estimates from proposed projects in U.S.									
<b>Note 4:</b> Capacity are based on methodologies from FDOT Generalized Tables, Transit Capacity and Quality of Service Manual, and Shared Use Path Level of Service Report. Total person capacity per mile = 12,000 for trails; 2,400 for sidewalks; 7,200 for protected bike lanes; 3,600 for complete streets; 8,400 for multimodal ways; 24,000 for riverwalk, 33,000 to widen road from 2 to 4 lanes, 72,000 for 4 lane road; 119,000 for 4 lane limited access, and 36,000 for share streets. Parking garage based on distance between garage and the intersection of King St and Cordova St times three vehicles per day and a vehicle occupancy of 1.81 based on 2017 NHTS. Regional rail based on 400 passenger times length of route times 14 hour span of service. Water taxi service projected at 125 passengers per hour times length times 16 hour span of service. Aerial tramway based on 6 passengers per car times 120 cars per hour times 2 way travel for 2 miles and a span of service of 16 hours.									

**Note 1:** Total multimodal cost @ 100% = \$48,604,360; Total parking facility cost = \$52,250,000 (Mobility Fee Share @ 5% = \$2,612,500); Total road cost = \$8,325,000 (regional road share = \$2,250,000); Regional road cost = \$90,000,000 (Mobility Fee Share @ 5% of new multimodal bridge only = \$2,250,000); Total transit cost = \$8,000,000 (regional transit share = \$1,250,000); Regional transit cost = \$64,600,000 (Mobility Fee Share @ 5% of aerial tramway only = \$1,250,000);

**Note 2:** Total multimodal capacity @ 100% = 413,688; Total parking capacity = 37,558 (Mobility Fee Share @ 5% = 1,878); Total road capacity = 31,130 (regional road share = 2,700); Regional road capacity = 125,250 (Mobility Fee Share @ 5% of new multimodal bridge only = 2,700); Total transit capacity = 26,800 (regional transit share = 2,304); Regional transit capacity = 79,680 (Mobility Fee Share @ 5% of aerial tramway only = 2,304);

**Note 3:** Cost are based on data from FDOT, City of St. Augustine, and industry standards. Cost include design, right-of-way, inspection, utility relocations and landscape. Total per mile cost = \$500,000 for trails; \$250,000 for sidewalks; \$1,000,000 for protected bike lanes; \$200,000 for mid-block crossings; \$500,000 for complete streets; \$1,000,000 for multimodal ways; \$7,000,000 for riverwalk, and \$7,500,000 to widen road from 2 to 4 lanes. Total cost for shared streets is \$1,100 per linear foot. Parking garage spaces are \$25,000 each. Water taxi docks are \$250,000 each. Microtransit vehicle cost are \$150,000 each and a total of 30 are proposed for the five transit circulator routes. Regional Rail cost are \$6,600,000 per mile based on projected cost from the North Florida TPO total rail cost between Jacksonville and St. Augustine (\$250 million for 38 miles). New bridge and flyover estimated at \$60,000,000 per mile based on recent bridge cost in Florida. Aerial tramways based on cost of \$12,500,000 per mile based on cost estimates from proposed projects in U.S.

**Note 4:** Capacity are based on methodologies from FDOT Generalized Tables, Transit Capacity and Quality of Service Manual, and Shared Use Path Level of Service Report. Total person capacity per mile = 12,000 for trails; 2,400 for sidewalks; 7,200 for protected bike lanes; 3,600 for complete streets; 8,400 for multimodal ways; 24,000 for riverwalk, 33,000 to widen road from 2 to 4 lanes, 72,000 for 4 lane road; 119,000 for 4 lane limited access, and 36,000 for share streets. Parking garage based on distance between garage and the intersection of King St and Cordova St times three vehicles per day and a vehicle occupancy of 1.81 based on 2017 NHTS. Regional rail based on 400 passenger times length of route times 14 hour span of service. Water taxi service projected at 125 passengers per hour times length times 16 hour span of service. Aerial tramway based on 6 passengers per car times 120 cars per hour times 2 way travel for 2 miles and a span of service of 16 hours.



## **Appendix F**

### **Trip Generation per Land Use**



## Appendix F: Trip Generation Source

Use Categories, Use Classifications, and Representative Uses	Unit of Measure	Trip Generation <sup>1</sup>	% New Trips	ITE Land Use Codes
<b>Residential &amp; Lodging Uses</b>				
Residential	per 1,000 sq. ft.	5.01	1.00	210, 215, 220, 221, 251, 252, <sup>2</sup>
Overnight Accommodations & Vacation Rentals (excludes bathrooms & kitchens)	per room	8.41	1.00	265, 310
Mobile Residence (Mobile Home, Recreational Vehicle, Travel Trailer)	per space / lot	5.80	1.00	240, 416 <sup>3</sup>
<b>Institutional Uses</b>				
Community Serving (Civic, Place of Assembly, Museum, Gallery)	per 1,000 sq. ft.	7.60	0.50	560
Long Term Care (Assisted Living, Congregate Care Facility, Nursing Facility)	per 1,000 sq. ft.	5.96	0.70	254, 620
Private Education (Day Care, Private Primary School, Pre-K)	per 1,000 sq. ft.	17.31	0.50	530, 532, 534 <sup>4</sup>
<b>Recreational Uses</b>				
Marina (Including dry storage) per berth	per berth	2.41	0.90	420
Outdoor Commercial Recreation (Amusement, Golf, Multi-Purpose, Sports, Tennis)	per acre	12.19	0.90	411, 430, 432, 480, 488, 490, 491 <sup>5</sup>
Indoor Commercial Recreation (Gym, Indoor Sports, Kids Activities, Recreation)	per 1,000 sq. ft.	23.07	0.90	434, 435, 436, 437, 492, 493, 495 <sup>6</sup>
<b>Industrial Uses</b>				
Industrial (Assembly, Manufacturing, Nursery, Outdoor Storage, Warehouse, Utilities)	per 1,000 sq. ft.	3.69	0.90	110, 130, 140, 150, 151, 154, 155, 156, 157, 160, 170, 180 <sup>7</sup>
<b>Office Uses</b>				
Office (Bank, General, Higher Education, Professional)	per 1,000 sq. ft.	11.62	0.80	710, 712, 714, 715, 750, 760, 770
Medical Office (Clinic, Dental, Emergency Care, Hospital, Medical, Veterinary)	per 1,000 sq. ft.	18.74	0.80	610, 630, 640, 650, 710, 720
<b>Commercial Services &amp; Retail Uses</b>				
Local Retail (Entertainment, Restaurant, Retail, Sales, Services)	per 1,000 sq. ft.	23.14	0.350	820, 821, 821, 822 <sup>8</sup>
Multi-Tenant Retail (Entertainment, Restaurant, Retail, Sales, Services)	per 1,000 sq. ft.	46.28	0.350	820, 821, 821, 822 <sup>8</sup>
Free-Standing Retail (Entertainment, Restaurant, Retail, Sales, Services)	per 1,000 sq. ft.	63.21	0.350	812, 813, 814, 815, 843, 848, 850, 857, 861, 862, 863, 869, 881, 899, 930, 931, <sup>8</sup>
<b>Additive Fees for Commercial Services &amp; Retail Uses</b>				
Bank Drive-Thru Lane or Free-Standing ATM	per lane or ATM	113.41	0.40	912 <sup>9</sup>
Motor Vehicle & Boat Cleaning (Detailing, Wash, Wax)	per lane or stall	145.84	0.20	947, 948, 949 <sup>10</sup>
Motor Vehicle Charging or Fueling	per charging or fueling position	231.49	0.15	944, 945 <sup>11</sup>
Pharmacy Drive-Thru	per lane	123.66	0.20	880, 881 <sup>12</sup>
Quick Service Restaurant Drive-Thru	per lane	381.78	0.20	934, 937, 938 <sup>13</sup>

<sup>1</sup> Institute of Transportation Engineers (ITE) 11th Edition Trip Generation Manual. The trip generation rates are based on the weekday trip generation rate per the indicated land use code. For uses where daily trips are not provided, the AM and PM Peak hours of adjacent street traffic where averaged and divided by a peak-to-daily ratio of 0.1 (on average 10% of daily traffic occurs during peak periods). For land uses with more than one ITE code, the trip generation was calculated by weighting trips based on the number of studies completed as indicated in the ITE Trip Generation Manual to ensure that a trip generation rate based on one (1) study does not have the same weight as a trip generation rate based on thirty (30) studies. Weighting is based on the total number of studies for each ITE Code listed under a use classification. The total studies per use were divided by the sum of studies completed for all ITE codes listed under a use classification. The final trip generation is equal to the sum of the weight per ITE code times the trip generation rate per ITE Code. See footnotes 2 below for example.



## Appendix F: Trip Generation Source

Use Categories, Use Classifications, and Representative Uses	Unit of Measure	Trip Generation <sup>1</sup>	% New Trips	ITE Land Use Codes
<sup>2</sup> Residential trip generation rates were converted into trip rates per 1,000 square feet. The first step in the conversion was assigning the following sq. ft. (typical industry standard) by type of unit per the 11th Edition of the ITE Trip Generation Manual: (210) single-family detached (2,000 sq. ft.); (215) single-family attached (1,200 sq. ft.); (220) multi-family (1,000 sq. ft.); (221) multi-family (800 sq. ft.); (251) senior adult detached (1,000 sq. ft.); (252) senior adult attached (800 sq. ft.). The assigned square footage of each unit type was divided by 1,000: (210) single family detached (2,000 / 1,000 = 2.0); (215) single-family attached (1,200 / 1,000 = 1.2); (220) multi-family (1,000 / 1,000 sq. ft. = 1.0); (221) multi-family (800 / 1,000 sq. ft. = 0.8); (251) senior adult detached (1,000 / 1,000 sq. ft. = 1.0); (252) senior adult attached (800 / 1,000 = 0.8). The following are the number of studies per ITE Code: (210) = 174; (215) = 22; (220) = 22; (221) = 11; (251) = 15; (252) = 6. Residential Study Weight: 174 + 22 + 22 + 11 + 15 + 6 = 250; (ITE 210) 174/250 = .696, (ITE 215) 22/250 = .088; (ITE 220) 22/250 = .088; (ITE 221) 11/250 = .044; (ITE 251) 15/250 = .06, (ITE 252) 6/250 = .024. Residential Weighted Trips: (ITE 210) 9.43 x .696 = 6.56; (ITE 215) 7.2 x .088 = 0.634; (ITE 220) 6.74 x .088 = 0.593; (ITE 221) 4.54 x .044 = 0.20; (ITE 251) 4.31 x .06 = 0.259; (ITE 252) 3.24 x .024 = 0.078. Residential Per 1,000 Sq. Ft. Rate: (ITE 210) 6.56 / 2.0 = 3.281, (ITE 215) 0.634 / 1.2 = 0.528; (ITE 220) 0.593 / 1.0 = 0.593; (ITE 221) 0.20 / 0.8 = 0.250; (ITE 251) 0.259 / 1.0 = .259; (ITE 252) 0.078 / 0.8 = .097. Residential Weighted Trip Generation: 3.281 + 0.528 + 0.593 + 0.20 + 0.259 + 0.097 = 5.01 (numbers rounded to nearest 100th place). The City may establish programs to qualify for affordable, attainable, and workforce residential designations.				
<sup>3</sup> The rate for RV Parks (ITE Code 416) is based on conversion of AM and PM Peak Hour of Adjacent Street Traffic converted to Daily trips based on a peak-to-daily ratio of 0.1 (10% of daily traffic occurs during peak hours). The rate for Mobile Home Parks (ITE Code 240) is unadjusted. The final trip generation is weighted based on total studies per footnote 1 and the process in footnote 2.				
<sup>4</sup> The study weighted trip generation rates per 1,000 sq. ft. are based on the weekday trip rate per student multiplied by 10 (roughly 100 sq. ft. per student 10 x 100 = 1,000 sq. ft.) and divided by 1.5 to account for 1.5 students per vehicle.				
<sup>5</sup> Golf driving range converted to acreage at two (2) tee positions per one acre, Soccer Complex fields converted to acres at ratio of 2 acres per 1 field, Racquet / Tennis Club assume 2 courts plus accessory buildings per acre, Utilized vehicle occupancy of 2 persons per vehicle.				
<sup>6</sup> Converted AM and PM Peak Hour Periods and applied a Peak to Daily Conversion of .1 (10% of daily traffic occurs during peak hours).				
<sup>7</sup> The ITE Code for use 155 is provided twice as there are two (2) separate trip generation rates for fulfillment centers based on the type of sorting of packages occurs.				
<sup>8</sup> The ITE Code for use 821 is provided twice as there are two (2) separate trip generation rates for multi-tenant centers with and with-out grocery stores. The local rate is derived by multiplying the rate per multi-tenant retail uses by 0.50%. Florida studies have shown local uses generate roughly 50% of the trips of national chains, which are the types of uses that primarily are collected for ITE studies.				
<sup>9</sup> The trip generation is based on the trip rate per drive-thru lane (125.03) minus the trips associated with office uses (11.62), since the bank square footage, falls under the office land use category.				
<sup>10</sup> The weighted trip generation (729.20) is divided by an average of five (5) stall per use. The trip rate for ITE Code 948 only provided a PM Peak.				
<sup>11</sup> The trip generation associated with vehicle fueling positions is based on the sum of trip generation per fueling positions (per identified ITE Land Use Codes). The following are the number of fuel positions and square footage for each ITE Land Use Code: (944) 12 positions and 1,500 sq. ft.; (945: 2K to 4K) 8 positions and 3,000 sq. ft.; (945: 4K to 5.5K) 14 positions and 4,750 sq. ft.; (945: 5.5K to 10K) 12 positions and 7,750 sq. ft.; The trip generation was reduced by multiplying the trip generation for free-standing retail (63.21) by the average square footage for each use evaluated. The net trip generation is then divided by the total number of fueling positions for each of the ITE Land Use Codes. The trip rate of 231.49 is the weighted net average rate per fuel position for the four ITE land use codes used in the analysis.				
<sup>12</sup> The trip generation is based on the difference in trip generation for pharmacies with drive-thru's (108.40) minus the trips for free-standing retail uses (63.21) and pharmacies with-out drive-thru's (90.08) minus the trips for free-standing retail uses (63.21). The net difference is then multiplied by the standard size of a pharmacy (13,500 sq. ft. / 1,000). The gross trip generation associated with drive-thru's is then divided by two (2) to account for the average number of drive-thru lanes associated with a pharmacy.				
<sup>13</sup> The trip generation rate for quick service drive thru lanes is determined by calculating the weighted trip generation rate (444.99) per 1,000 sq. ft. for the three (3) land uses minus the trips associated with free-standing retail uses (63.21).				



## **Appendix G**

### **2017 National Household Travel Survey: Person Travel**



**Appendix G: City of St. Augustine Mobility Fee: 2017 National Household Travel Survey Data for Florida: Person Trips**

Trip Purpose	Trip Length	Number of Trips	Average Trip Length	Number of Persons	Person Trip Rate	Person Miles of Travel (PMT)	PMT Rate	Vehicle Miles of Travel (VMT)	Average Trip Length	Number of Vehicles	# of Person per Vehicle	Vehicle Occupancy
Entertainment, Errands, Buy Goods, Services & Meals	5,936	1,955	3.04	3,690	1.89	11,352	1.94	5,851	3.25	1,802	3,398	1.89
Errands, Buy Services	848	315	2.69	504	1.60	1,317	1.57	837	2.90	289	474	1.64
Errands, Buy Goods & Services	3,721	1,272	2.93	2,153	1.69	6,268	1.70	3,684	3.05	1,206	2,077	1.72
Entertainment, Exercise, Errands	1,489	570	2.61	1,016	1.78	2,688	1.96	1,368	3.34	410	735	1.79
Entertainment, Religious, Errands	1,442	463	3.11	921	1.99	2,997	2.14	1,403	3.53	398	800	2.01
Family Care / School / Errands	810	290	2.79	512	1.77	1,467	1.88	778	3.09	252	470	1.87
Medical, Errands	763	258	2.96	385	1.49	1,145	1.52	752	3.23	233	357	1.53
Work, Errands	2,847	776	3.67	1,003	1.29	3,480	1.24	2,807	3.92	716	921	1.29
Home	6,411	2,067	3.10	3,801	1.84	12,512	2.04	6,135	3.53	1,737	3,334	1.92

Note: 2017 National Household Travel Survey Data for the State of Florida based on trips of 10 miles or less in length



## **Appendix H**

### **Person Travel Demand (PTD) per Land Use**



**Appendix H: Person Travel Demand (PTD) by Use**

Use Categories, Use Classifications, and Representative Uses	Unit of Measure	Person Trip Factor	Person Trip Length	Person Travel Demand
<b>Residential &amp; Lodging Uses</b>				
Residential	per 1,000 sq. ft.	1.84	3.10	12.42
Overnight Accommodations & Vacation Rentals (excludes bathrooms & kitchens)	per room	1.84	3.10	20.84
Mobile Residence (Mobile Home, Recreational Vehicle, Travel Trailer)	per space / lot	1.84	3.10	14.37
<b>Institutional Uses</b>				
Community Serving (Civic, Place of Assembly, Museum, Gallery)	per 1,000 sq. ft.	1.99	3.11	10.22
Long Term Care (Assisted Living, Congregate Care Facility, Nursing Facility)	per 1,000 sq. ft.	1.84	3.10	10.34
Private Education (Day Care, Private Primary School, Pre-K)	per 1,000 sq. ft.	1.77	2.79	18.57
<b>Recreation Uses</b>				
Marina (Including dry storage) per berth	per berth	1.78	2.61	4.38
Outdoor Commercial Recreation (Amusement, Golf, Multi-Purpose, Sports, Tennis)	per acre	1.78	2.61	22.15
Indoor Commercial Recreation (Gym, Indoor Sports, Kids Activities, Recreation)	per 1,000 sq. ft.	1.78	2.61	41.91
<b>Industrial Uses</b>				
Industrial (Assembly, Manufacturing, Nursery, Outdoor Storage, Warehouse, Utilities)	per 1,000 sq. ft.	1.29	3.67	6.83
<b>Office Uses</b>				
Office (Bank, General, Higher Education, Professional)	per 1,000 sq. ft.	1.29	3.67	19.12
Medical Office (Clinic, Dental, Emergency Care, Hospital, Medical, Veterinary)	per 1,000 sq. ft.	1.49	2.96	28.73
<b>Commercial Services &amp; Retail Uses</b>				
Local Retail (Entertainment, Restaurant, Retail, Sales, Services)	per 1,000 sq. ft.	1.89	3.04	20.22
Multi-Tenant Retail (Entertainment, Restaurant, Retail, Sales, Services)	per 1,000 sq. ft.	1.89	3.04	40.44
Free-Standing Retail (Entertainment, Restaurant, Retail, Sales, Services)	per 1,000 sq. ft.	1.89	3.04	55.23
<b>Additive Fees for Commercial Services &amp; Retail Uses</b>				
Bank Drive-Thru Lane or Free-Standing ATM	per lane or ATM	1.60	2.69	84.83
Motor Vehicle & Boat Cleaning (Detailing, Wash, Wax)	per lane or stall	1.60	2.69	54.55
Motor Vehicle Charging or Fueling	per charging or fueling position	1.69	2.93	74.71
Pharmacy Drive-Thru	per lane	1.69	2.93	53.21
Quick Service Restaurant Drive-Thru	per lane	1.99	3.02	199.39



## **Appendix I**

### **St. Johns County Road Impact Fees**



# St. Johns County's Schedule of Fees and Services

## Impact Fees

### IMPACT FEE SCHEDULE (per County Ordinance 2018-16)

LAND USE TYPE	Unit of Measurement	Roads	Buildings	Law Enforcement	Fire/Rescue	Parks	Schools	TOTAL
<b>RESIDENTIAL:</b>								
Under 800 FT <sup>2</sup>	Unit	\$5,849	\$465	\$218	\$141	\$936	\$1,523	\$9,132
801-1,250	Unit	\$6,948	\$553	\$258	\$379	\$1,113	\$2,787	\$12,038
1,251-1,800	Unit	\$7,166	\$570	\$266	\$499	\$1,148	\$4,027	\$13,676
1,801-2,500	Unit	\$8,927	\$710	\$331	\$618	\$1,429	\$5,016	\$17,031
2,501-3,750	Unit	\$10,384	\$826	\$385	\$857	\$1,662	\$7,036	\$21,150
3,751-5,000	Unit	\$12,031	\$958	\$447	\$1,094	\$1,927	\$7,341	\$23,798
5,001 FT <sup>2</sup> and Over	Unit	\$12,702	\$1,011	\$472	\$1,333	\$2,034	\$7,463	\$25,015
Hotel/Motel	Room	\$3,548	\$332	\$155	\$40	\$167	\$0	\$4,242
<b>INDUSTRIAL:</b>								
General Industrial	1,000 FT <sup>2</sup>	\$1,462	\$200	\$93	\$15	\$0	\$0	\$1,770
Warehousing	1,000 FT <sup>2</sup>	\$513	\$136	\$63	\$10	\$0	\$0	\$722
Mini-warehousing	1,000 FT <sup>2</sup>	\$445	\$19	\$9	\$1	\$0	\$0	\$474
<b>OFFICE:</b>								
General Office < 100k FT <sup>2</sup>	1,000 FT <sup>2</sup>	\$2,760	\$608	\$283	\$182	\$0	\$0	\$3,833
General Office 100-200k FT <sup>2</sup>	1,000 FT <sup>2</sup>	\$2,611	\$484	\$226	\$145	\$0	\$0	\$3,466
General Office > 200k FT <sup>2</sup>	1,000 FT <sup>2</sup>	\$2,372	\$365	\$170	\$110	\$0	\$0	\$3,017
<b>COMMERCIAL:</b>								
Commercial < 100K FT <sup>2</sup>	1,000 FT <sup>2</sup>	\$3,251	\$1,304	\$609	\$117	\$0	\$0	\$5,281
Commercial 100-199K FT <sup>2</sup>	1,000 FT <sup>2</sup>	\$4,464	\$1,168	\$545	\$104	\$0	\$0	\$6,281
Commercial 200-299K FT <sup>2</sup>	1,000 FT <sup>2</sup>	\$5,119	\$1,025	\$479	\$92	\$0	\$0	\$6,715
Commercial 300-399K FT <sup>2</sup>	1,000 FT <sup>2</sup>	\$5,973	\$875	\$408	\$78	\$0	\$0	\$7,334
Commercial 400-499K FT <sup>2</sup>	1,000 FT <sup>2</sup>	\$6,945	\$815	\$380	\$73	\$0	\$0	\$8,213
Commercial > 500K FT <sup>2</sup>	1,000 FT <sup>2</sup>	\$7,536	\$750	\$350	\$67	\$0	\$0	\$8,703
Bank/Financial Institution	1,000 FT <sup>2</sup>	\$8,526	\$433	\$202	\$39	\$0	\$0	\$9,200
Service Station – all types	Fueling Station	\$3,188	\$603	\$282	\$54	\$0	\$0	\$4,127
Pharmacy w/Drive Thru	1,000 FT <sup>2</sup>	\$3,796	\$470	\$220	\$42	\$0	\$0	\$4,528
Fast Food w/Drive Thru	1,000 FT <sup>2</sup>	\$11,529	\$1,012	\$473	\$90	\$0	\$0	\$13,104
<b>RECREATIONAL:</b>								
Gen Recreation	Acre	\$725	\$43	\$20	\$4	\$0	\$0	\$792
Campground/RV Park	Acre	\$18,040	\$5,871	\$2,741	\$525	\$0	\$0	\$27,177
Marina	Berth	\$466	\$81	\$38	\$7	\$0	\$0	\$592
Health/Fitness Club	1,000 FT <sup>2</sup>	\$5,705	\$500	\$234	\$45	\$0	\$0	\$6,484
<b>INSTITUTIONAL:</b>								
Elementary School	1,000 FT <sup>2</sup>	\$1,489	\$354	\$165	\$32	\$0	\$0	\$2,040
High School	1,000 FT <sup>2</sup>	\$1,315	\$323	\$151	\$29	\$0	\$0	\$1,818
College	1,000 FT <sup>2</sup>	\$2,066	\$309	\$144	\$27	\$0	\$0	\$2,546
<b>MEDICAL:</b>								
Hospital	1,000 FT <sup>2</sup>	\$1,948	\$954	\$445	\$85	\$0	\$0	\$3,432
Nursing Home	1,000 FT <sup>2</sup>	\$1,137	\$67	\$31	\$6	\$0	\$0	\$1,241
Medical Office	1,000 FT <sup>2</sup>	\$6,885	\$797	\$372	\$71	\$0	\$0	\$8,125

NOTE: Amounts rounded to the nearest dollar.

NOTE (2): Impact Fee credit cannot exceed the amount due by category for the proposed new use.

**Note: Fees are applicable to all individuals and organizations and can only be waived by official action of the Board of County Commissioners. Taxes will be assessed when applicable.**



## **Appendix J**

### **St. Augustine Mobility Fee vs. St. Johns County Road Impact Fees Comparison**



**APPENDIX J: CITY OF ST. AUGUSTINE MOBILITY FEE vs. ST. JOHNS COUNTY ROAD IMPACT FEE COMPARISON**

Use Categories, Use Classifications, and Representative Uses	FOR COMPARISON PURPOSES ONLY				RECOMMENDATION	
	St. Augustine		St. Johns County		St. Augustine	
	Unit of Measure	Mobility Fee	Unit of Measure	Road Impact Fee	Recommended Unit of Measure	Recommended Mobility Fee
<b>Residential &amp; Lodging Uses, per applicable unit of measure</b>						
Residential	per 1,000 sq. ft.	\$ 1,050	<i>per dwelling</i>	\$ 6,194	per sq. ft.	\$ 1.05
Overnight Accommodations & Vacation Rentals (excludes bathrooms & kitchens)	per room	\$ 1,763	<i>per room</i>	\$ 3,757	per room	\$ 1,763
Mobile Residence (Mobile Home, Recreational Vehicle, Travel Trailer)	per space / lot	\$ 1,216	<i>per acre</i>	\$ 19,104	per space / lot	\$ 1,216
<b>Institutional Uses</b>						
Community Serving (Civic, Place of Assembly, Museum, Gallery)	per 1,000 sq. ft.	\$ 864	<i>per 1,000 sq. ft.</i>	\$ 2,923	per sq. ft.	\$ 0.86
Long Term Care (Assisted Living, Congregate Care Facility, Nursing Facility)	per 1,000 sq. ft.	\$ 874	<i>per 1,000 sq. ft.</i>	\$ 1,204	per sq. ft.	\$ 0.87
Private Education (Day Care, Private Primary School, Pre-K)	per 1,000 sq. ft.	\$ 1,571	<i>per 1,000 sq. ft.</i>	\$ 1,577	per sq. ft.	\$ 1.57
<b>Recreation Uses, per applicable unit of measure</b>						
Marina (Including dry storage)	per berth	\$ 370	<i>per berth</i>	\$ 493	per berth	\$ 370
Outdoor Commercial Recreation (Amusement, Golf, Multi-Purpose, Sports, Tennis)	per acre	\$ 1,873	<i>per acre</i>	\$ 768	per acre	\$ 1,873
Indoor Commercial Recreation (Gym, Indoor Sports, Kids Activities, Recreation)	per 1,000 sq. ft.	\$ 3,545	<i>per 1,000 sq. ft.</i>	\$ 6,041	per sq. ft.	\$ 3.54
<b>Industrial Uses</b>						
Industrial (Assembly, Manufacturing, Nursery, Outdoor Storage, Warehouse, Utilities)	per 1,000 sq. ft.	\$ 578	<i>per 1,000 sq. ft.</i>	\$ 1,549	per sq. ft.	\$ 0.58
<b>Office Uses</b>						
Office (Bank, General, Higher Education, Professional)	per 1,000 sq. ft.	\$ 1,617	<i>per 1,000 sq. ft.</i>	\$ 2,923	per sq. ft.	\$ 1.62
Medical Office (Clinic, Dental, Emergency Care, Hospital, Medical, Veterinary)	per 1,000 sq. ft.	\$ 2,430	<i>per 1,000 sq. ft.</i>	\$ 7,292	per sq. ft.	\$ 2.43
<b>Commercial Services &amp; Retail Uses</b>						
Local Retail (Entertainment, Restaurant, Retail, Sales, Services)	per 1,000 sq. ft.	\$ 1,710	<i>per 1,000 sq. ft.</i>	\$ 3,443	per sq. ft.	\$ 1.71
Multi-Tenant Retail (Entertainment, Restaurant, Retail, Sales, Services)	per 1,000 sq. ft.	\$ 3,420	<i>per 1,000 sq. ft.</i>	\$ 4,727	per sq. ft.	\$ 3.42
Free-Standing Retail (Entertainment, Restaurant, Retail, Sales, Services)	per 1,000 sq. ft.	\$ 4,671	<i>per 1,000 sq. ft.</i>	\$ 5,421	per sq. ft.	\$ 4.67
<b>Additive Fees for Commercial Services &amp; Retail Uses, per applicable unit of measure</b>						
Bank Drive-Thru or Free-Standing ATM	per lane or ATM	\$ 7,174	<i>per 1,000 sq. ft.</i>	\$ 9,029	per lane or ATM	\$ 7,174
Motor Vehicle & Boat Cleaning (Detailing, Wash, Wax)	per lane or stall	\$ 3,420	<i>per 1,000 sq. ft.</i>	\$ 3,443	per lane or stall	\$ 3,420
Motor Vehicle Charging or Fueling	per charging or fueling position	\$ 6,318	<i>per charging or fueling position</i>	\$ 3,376	per charging or fueling position	\$ 6,318
Pharmacy Drive-Thru	per lane	\$ 4,500	<i>per 1,000 sq. ft.</i>	\$ 4,020	per lane	\$ 4,500
Quick Service Restaurant Drive-Thru	per lane	\$ 16,862	<i>per 1,000 sq. ft.</i>	\$ 12,209	per lane	\$ 16,862





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THE  
**REPUBLIC**  
 DESIGN<sup>INC.</sup>

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