

Imagine 2040: Hillsborough Long Range Transportation Plan

Summary Report

Prepared For:
Hillsborough County Metropolitan Planning Organization for Transportation



601 E. Kennedy Boulevard, 18th Floor
Tampa, FL 33602
(813) 272-5940

www.planhillsborough.org

Prepared By:
Atkins North America

ATKINS

4030 West Boy Scout Boulevard, Suite 700
Tampa, FL 33607
(813) 282-7275

Adopted: November 12, 2014

The preparation of this report has been financed in part through grants from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the Metropolitan Planning Program, Section 104(f) of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

Table of Contents

Chapter One	Introduction	1
Chapter Two	Context of the Imagine 2040 Plan	15
Chapter Three	Building the Plan	50
Chapter Four	Available Funds and Financial Scenarios	100
Chapter Five	The Adopted Imagine 2040 Plan	154

List of Figures

Chapter Two

Figure 2-1: Tampa Bay Area Commuting Patterns	16
Figure 2-2: OneBay Regional Vision, Tampa Bay Regional Planning Council	17
Figure 2-3: TBARTA Recommended Mid-Term Improvements	18
Figure 2-4: TBARTA Recommended Long Term Improvements	19
Figure 2-5: Tampa Bay Peer Regions Congestion Index	20
Figure 2-6: CCC High Priority Corridors Map	21
Figure 2-7: TED's Spine Network Map for Hillsborough County	23

Figure 2-8: Map of an example KES Area	24
Figure 2-9: Historic and Projected Growth in Employment and Population in Hillsborough County by 2040	26
Figure 2-10: Where Jobs and People are Concentrated Today	27
Figure 2-11: 2040 Population and Employment Patterns under the Suburban Dream Scenario	28
Figure 2-12: 2040 Population and Employment Patterns under the Bustling Metro Scenario	29
Figure 2-13: 2040 Population and Employment Patterns under the New Corporate Centers Scenario	29
Figure 2-14a: Performance of Each Growth Scenario	33
Figure 2-14b: Performance of Each Growth Scenario	34
Figure 2-15: Your Desired Housing Growth Mix	35
Figure 2-16: Your Desired Job Centers Mix	35
Figure 2-17: 2040 Population and Employment Centers with Preferred Hybrid Scenario	36
Figure 2-18: Growth Forecasts and Ratios Based on the Preferred Hybrid Growth Scenario	37

Chapter Three

Figure 3-1: Bridges in Hillsborough County and City of Tampa Identified for Replacement	53
Figure 3-2: Summary of Pavement Preservation Investment Levels	54
Figure 3-3: Investment Levels and Statistics for Transit Vehicle Fleet Replacement	55
Figure 3-4: Existing Tampa Bay Congested Corridors Map	56
Figure 3-5: Existing Hillsborough County Congested Intersections Map	57
Figure 3-6: Congestion Management Costs and Benefits	59
Figure 3-7: Freight Program Funding Tier Spending	64
Figure 3-8: Severe Crash Hot Spots in Hillsborough County	66
Figure 3-9: Pedestrian Crash Areas	67
Figure 3-10: Severe Crashes by Category	67
Figure 3-11: Fatal Crashes by Category	67
Figure 3-12: Injury and Fatality Crashes per 100 Million VMT	68
Figure 3-13: Crash Reduction Costs and Benefits	70
Figure 3-14: Complete Streets Potential Projects	71

Figure 3-15: Potentially Disrupted Links in Pinellas and Hillsborough Counties During and After a Category 3 Hurricane	72
Figure 3-16: Transit Performance Measures for Each Investment Level	76
Figure 3-17: Quality of Service with Each Level of Investment	77
Figure 3-18: Map of Transit Service in Hillsborough County with Low Investment Level	77
Figure 3-19: Map of Transit Service in Hillsborough County with Medium Investment Level	78
Figure 3-20: Map of Transit Service in Hillsborough County with High Investment Level	78
Figure 3-21: Transportation Disadvantaged Living Outside of Bus Service Area	79
Figure 3-22: Benefits and Costs of Trail/Sidepath Investment Levels	82
Figure 3-23: Trails/Sidepaths Planned and Potential Corridors Map	83
Figure 3-24: Key Economic Spaces & Potential Growth 2010 and 2040 Job Estimates	84
Figure 3-25: Job Clusters in Hillsborough County	85
Figure 3-26: 2040 Traffic Volumes	86

Figure 3-27: Map of Potential Transit KES and Regional Connections	87
Figure 3-28: Rendering of Proposed Westshore Multimodal Center	88
Figure 3-29: 2040 Needs Assessment for Capacity Projects	89
Figure 3-30: Tampa Bay Express Lanes and Intermodal System	92
Figure 3-31: Financially Unconstrained SIS 2040 Needs Project List	93
Figure 3-32: Development Based Needs Projects	95
Figure 3-33: 2040 Needs Projects	96
Figure 3-34: Longer Range Vision: Highways	98
Figure 3-35: Longer Range Vision: Transit	99

Chapter Four

Figure 4-1: Federal Tax Rates and Account Distribution of the Highway and Mass Transit Accounts	102
Figure 4-2: State Transportation Revenue Sources, FY 2013	103
Figure 4-3: Federal and State Highway Funding, FY 2021-2040	106
Figure 4-4: Hillsborough MPO's Share of Metropolitan Funds Based on 49% of the Urbanized Area Population	107
Figure 4-5: Hillsborough MPO's Share of Metropolitan Funds Based on 42% of the FDOT's District 7 Population	108

Figure 4-6: Transit – Federal and State Programs, FY 2021-2040	108
Figure 4-7: Constitutional, County, and Municipal Fuel Tax, FY 2021-2040	112
Figure 4-8: Existing CIT Revenues through 2026	116
Figure 4-9: Local Funding Forecast, FY 2021-2040	119
Figure 4-10: Total Projected Revenues FY 2019-2040	120
Figure 4-11: Distribution of Additional Revenues from CIT Millions of YOE Dollars, Extended beyond 2026 (net of allocation to School Board)	123
Figure 4-12: Potential New Local Funding Sources, FY 2021-2040	125
Figure 4-13: All Expected and Potential Funding Sources and Amounts they are anticipated to raise by 2040	126
Figure 4-14: Transportation Investments in Order of Priority, 2012 Phone Poll	127
Figure 4-15: Of Those Who Did Not Support a 1 Cent Sales Tax, 17% Would Support a ½ Cent Sales Tax, 2012 phone poll	128
Figure 4-16: What About Other Kinds of Taxes, 2012 Phone Poll	129
Figure 4-17: Important Issues Facing Our Community, 2012 Phone Poll	129

Figure 4-18: Scenario 1 Expenditures and Revenues	131
Figure 4-19: Map of Scenario 1 Major Capacity Projects	132
Figure 4-20: Scenario 2 Expenditures and Revenues	133
Figure 4-21: Map of Scenario 2 Major Capacity Projects	133
Figure 4-22: Scenario 3 Expenditures and Revenues	134
Figure 4-23: Map of Scenario 3 Major Capacity Projects	135
Figure 4-24: Scenario 4 Expenditures and Revenues	136
Figure 4-25: Map of Scenario 4 Major Capacity Projects	136
Figure 4-26: Scenario 5 Expenditures and Revenues	137
Figure 4-27: Map of Scenario 5 Major Capacity Projects	138
Figure 4-28: Fixed Guideway Investments Studied in Scenario 5	139
Figure 4-29: Scenario 6 Expenditures and Revenues	140
Figure 4-30: Map of Scenario 6 Major Capacity Projects	141
Figure 4-31: Scenario 7 Expenditures and Revenues	142
Figure 4-32: Map of Scenario 7 Major Capacity Projects	142
Figure 4-33: Fixed Guideway Investments Studied in Scenario 7	143

Figure 4-34: Scenario 8 Expenditures and Revenues	144
Figure 4-35: Map of Scenario 8 Major Capacity Projects	145
Figure 4-36: Fixed Guideway Investments Studied in Scenario 8	146
Figure 4-37: Vehicle Hours Delay in 2040 with each Funding Scenario	147
Figure 4-38: Number of Transit Riders in 2040 with each Funding Scenario	148
Figure 4-39: Survey Multiple-Choice Question on Growth Strategies	149
Figure 4-40: Major Capacity Projects in KES Areas	150
Figure 4-41: Where Imagine 2040: Part 2 Survey Respondents Reside	151
Figure 4-42: Imagine 2040: Part 2 Survey Responses by Zip Code, With Population Density Shown in Blue	151
Figure 4-43: Preferred Funding Level for Each Investment Program	153
Figure 4-44: Top Areas and Number of Respondents Opting to Invest in Major Capacity Projects	153
Figure 4-45: Total Spending Level Preferences of On-Line Respondents	154

Chapter Five

Figure 5-1: Scenario 1 Performance Measures	155
Figure 5-2: Scenario 8b (Adopted Plan) Performance Measures	155
Figure 5-3: Comparison of Expenditures and Revenues between Scenario 1 and Scenario 8a (excluding SIS projects and funding)	156
Figure 5-4: Adopted Plan: Overview of Expenditures and Revenues	157
Figure 5-5: Adopted Plan: Forecast Revenues and Sources (excluding SIS projects and funding)	158
Figure 5-6: Adopted Plan Spending Levels for Investment Programs	159
Figure 5-7: Road Resurfacing Comparison between Scenario 1 (Current Funding Level) and Scenario 8b, the Adopted Plan	160
Figure 5-8: Preserve the System Program Investments	161
Figure 5-9: “Minimize Congestion for Drivers and Shippers” Comparison between Scenario 1 (Current Funding Level) and Scenario 8b, the Adopted Plan	162
Figure 5-10: Minimize Congestion for Drivers and Shippers Program Investments	163
Figure 5-11: Reduce Crashes and Vulnerability Program Investments	164
Figure 5-12: Real Choices When Not Driving Program Investments	166

Figure 5-13: Cost Feasible Projects for New Capacity: Non-SIS Major Corridors	168
Figure 5-14: Map of 2040 Plan Capacity Projects with Adjustments for Scenario 8b (Adopted Plan)	172
Figure 5-15: Cost Feasible FDOT Strategic Intermodal System Projects	174
Figure 5-16: Cost Feasible Projects for New Capacity: Development Based Needs	177
Figure 5-17: Metropolitan Transportation Planning Funds	178
Figure 5-18: Adopted Plan: Forecast Revenues and Expenditures (Not Including SIS)	179
Figure 5-19: Adopted Plan (Scenario 8b) Capacity Projects Performance	180
Figure 5-20: 2040 Cost Affordable Capacity Improvement Projects	181
Figure 5-21: FY 2014/2015 – FY 2018/2019 Transportation Improvement Program (TIP) Projects	183
Figure 5-22: Existing Plus Committed Capacity Projects	184

Supporting Documents (available on MPO website)

Revenue Forecasts

<http://www.planhillsborough.org/wp-content/uploads/2014/09/2040-LRTP-Revenue-Forecasts-Tech-Memo.pdf>

Assessments of the Need for Improving Transportation Programs:

Preserving the System

<http://www.planhillsborough.org/wp-content/uploads/2014/09/2040-LRTP-System-Preservation-Costs-Benefits-Tech-Memo.pdf>

Minimizing Traffic for Drivers & Shippers

<http://www.planhillsborough.org/wp-content/uploads/2014/09/2040-LRTP-Congestion-Management-Costs-Benefits-Tech-Memo.pdf>

<http://www.planhillsborough.org/wp-content/uploads/2014/09/2040-LRTP-Freight-Program-Costs-Benefits-Tech-Memo.pdf>

Crash & Vulnerability Reduction

<http://www.planhillsborough.org/wp-content/uploads/2014/09/2040-LRTP-Crash-Reduction-Costs-Benefits-Tech-Memo.pdf>

<http://www.planhillsborough.org/wp-content/uploads/2014/09/2040-LRTP-Vulnerability-Reduction-Tech-Memo.pdf>

Real Choices When Not Driving

http://www.planhillsborough.org/wp-content/uploads/2014/09/2040-LRTP-RealChoices_TechMemo.pdf

Major Investments for Economic Growth

<http://www.planhillsborough.org/wp-content/uploads/2014/10/Capacity-Cost-Estimates-Tech-Memo.pdf>

Growth Forecasts (Socioeconomic Data)

<http://www.planhillsborough.org/wp-content/uploads/2014/07/SE-Data-Tech-Memo-2014-7-9-Final.pdf>

<http://www.planhillsborough.org/wp-content/uploads/2014/07/SE-Data-TM-Appendix-A.pdf>

<http://www.planhillsborough.org/wp-content/uploads/2014/07/SE-Data-TM-Appendix-B.pdf>
<http://www.planhillsborough.org/wp-content/uploads/2014/07/SE-Data-TM-Appendix-C.pdf>
<http://www.planhillsborough.org/wp-content/uploads/2014/07/SE-Data-TM-Appendix-D.pdf>
<http://www.planhillsborough.org/wp-content/uploads/2014/07/SE-Data-TM-Appendix-E.pdf>
<http://www.planhillsborough.org/wp-content/uploads/2014/07/SE-Data-TM-Appendix-F.pdf>
<http://www.planhillsborough.org/wp-content/uploads/2014/07/SE-Data-TM-Appendix-G.pdf>
<http://www.planhillsborough.org/wp-content/uploads/2014/07/SE-Data-TM-Appendix-H.pdf>
<http://www.planhillsborough.org/wp-content/uploads/2014/07/SE-Data-TM-Appendix-I.pdf>
<http://www.planhillsborough.org/wp-content/uploads/2014/07/2010-TAZ-Map.pdf>

Public Involvement

http://www.planhillsborough.org/wp-content/uploads/2013/12/Imagine2040_Survey_Final_Results.pdf
http://www.planhillsborough.org/wp-content/uploads/2014/05/Imagine_2040_Results_ExecSumm.pdf
http://www.planhillsborough.org/wp-content/uploads/2014/10/NeedsAssessment-PublicEngagement_FINAL_Nov_2014.pdf