

### **Chapter 8**

#### **Recommendations & Financial Plan**

Dutchess County and the greater Mid-Hudson Valley face numerous challenges in the coming years, including population growth, aging infrastructure, and constrained funding resources at the federal, State, and local level. However, the prospects of limited funding do not absolve the Council from its responsibility to plan for the future. The road ahead will be difficult, but it is one that has been travelled by generations before us. And no matter how complex the challenges may seem, it is our responsibility to do the best we can with the resources we have. It is in this spirit that the recommendations in *Moving Dutchess* were developed.

*Moving Dutchess* provides a framework for addressing transportation needs and priorities for Dutchess County. These were identified through a comprehensive planning process that encompassed four major elements:

1. A review of federal, State, and local guidance, including previous Council studies and local comprehensive plans.
2. An analysis of transportation system data, including road and bridge conditions, transit use, vehicle crashes, traffic volumes, and travel times (congestion).
3. Information gathered from public outreach, which included six workshops held throughout the county, a public survey, and monthly meetings of the Council's Technical Committee.
4. An assessment of where population growth could occur.

In a departure from the Council's previous Metropolitan Transportation Plans, *Moving Dutchess* recommends specific projects to preserve and improve the transportation system. This was done to increase the value of the plan to public agencies and local communities by providing them greater detail on where to target future investments. A key goal throughout the development of *Moving Dutchess* was creating a relevant and targeted plan. Much of this was possible due to advances in mapping and the increased availability of information. For example, instead of stating that our roads and bridges should be maintained, we are now able to pinpoint which roads and bridges need to be repaired and when.

*Moving Dutchess* also recommends policies to better preserve and improve our transportation system. Not all solutions to our future challenges require the construction of a project. Adopting and implementing new policies and procedures, especially as they relate to land use decisions and project delivery, can influence the system more than many projects.

By law, *Moving Dutchess* is required to have a Financial Plan that demonstrates how the recommendations will be funded. The Financial Plan uses planning-level cost estimates and forecasts of reasonably expected funding to ensure that the recommendations are financially constrained and not simply a "wish list" of projects. Project cost estimates are adjusted for inflation based on the project's Year of Expenditure (YOE), providing a more realistic estimate of funding needs. These projects represent the financially constrained list of project

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recommendations.

In order to account for worthy projects that do not have available funding, a financially unconstrained list of projects was also developed. Many of these projects go beyond preserving the existing transportation system, and increase highway or transit capacity and improve quality of life. Though funding is not currently available for these projects, they are included in the event that funding becomes available.

### **Project-level Recommendations**

*Moving Dutchess* makes recommendations for the 29-year period from 2012-2040. The recommendations are divided into short-range (2012-2015), mid-range (2016-2025), and long-range (2026-2040) time periods, which are related to the projects' relative priority and complexity, and the availability of funding.

In general, short-range projects have the highest priority and are already programmed on the Council's 2011-2015 Transportation Improvement Program (TIP). This time period is the most financially constrained, due to the limited funding available in the short term. The mid- and long-range time periods include projects to preserve the transportation system, enhance transportation safety, and increase accessibility. Many of these projects are more complex than the short-term projects and will require more time to design and complete.

The recommended projects are categorized into eight project types, which relate to the general focus of the project:

1. Bridge Maintenance: replacement or rehabilitation of bridges that are currently in or are expected to be in poor condition.
2. Highway Maintenance: reconstruction or rehabilitation of road segments that are currently in or are expected to be in poor condition.
3. Highway Operations: intersection, turning lane, and traffic signal projects to improve traffic operations and reduce congestion.
4. Pedestrian/Bicycle: construction or rehabilitation of sidewalks, crosswalks, trails, and other non-motorized facilities to improve personal safety and accessibility.
5. Planning Study: subjects or locations requiring specific transportation-related analysis, including corridor management plans and pedestrian/bicycle studies.
6. Safety: intersection and road improvements to increase safety, as well as safety audits.
7. Travel Demand Management (TDM): rideshare and vanpool activities to reduce the number of single-occupant vehicles on major travel corridors.
8. Transit: bus replacements, operating assistance, and preventive maintenance activities for transit providers, as well as facility upgrades and information technology projects for bus and commuter rail.

Categorizing the recommendations into project types assists with financial planning, since future funding assumptions are based on funding programs for three overall project funding sources/types: highway/bridge, transit, and planning.

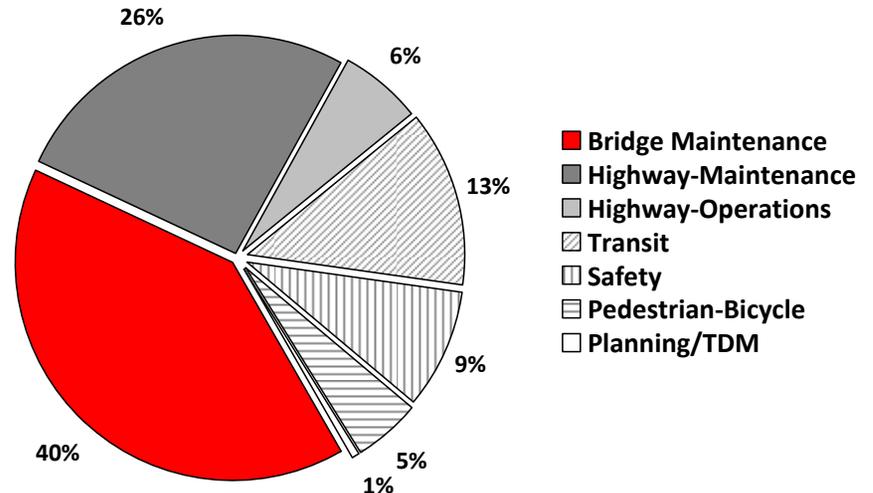
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The location, estimated cost, federal-aid eligibility, and an air quality designation code are provided for each recommended project. Projects that are already programmed on the 2011-2015 TIP are also identified. Although *Moving Dutchess* recommends a variety of new projects, this does not mean that funding has been programmed for the project. Projects must first be added to the TIP to move forward; this requires separate approval by the Council, the availability of funding, and a commitment by the project sponsor to progress the project in a timely manner.

Cost estimates were calculated using recent planning-level unit costs (by project type and scope) to estimate a total project cost, which was then inflated to reflect a YOE cost. The Council used a 3 percent annual inflation factor to estimate YOE costs. This aligns with the Bureau of Labor Statistics' Consumer Price Index annual average over the past 30 years (1981-2010) and is consistent with inflation rates used by other MPOs and transportation agencies in New York.

The estimated costs for short-range projects were based on a 2015 YOE; if the project was programmed on the TIP, the cost on the TIP was used. The estimated costs for mid-range and long-range projects were based on a middle year within the time period (2020 and 2035 respectively). For example, a 100 foot bridge recommended for rehabilitation during the long-range time period (2026-2040) was estimated to cost \$1.3 million (\$13,000 per foot) to repair in 2011 dollars and \$2.6 million (\$26,400 per foot) in 2035 dollars. Figure 8-1 shows the percent of total estimated funding by project type.

Figure 8-1. Percent of Total Estimated Funding by Project Type



The Council emphasizes that the costs associated with the recommendations are planning-level estimates only; they should not be used as site specific construction cost estimates.

This is especially true for highway and bridge maintenance projects, which require site-specific analyses to determine their true cost. The cost estimates were simply calculated to determine the approximate level of investment needed to preserve the federal-aid transportation system, maintain safety and mobility, and protect quality of life.

*Moving Dutchess* recommends a variety of federal-aid eligible projects and studies over the 29-year planning period. The majority of these projects are maintenance-related, striving to maintain public safety and preserve the system as best as possible. Table 8-1, located at the end of this chapter, lists the non-bridge recommendations for *Moving Dutchess*; please

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note this includes non-federal aid eligible projects for informational purposes only. Bridge-related recommendations are shown in Appendix B. Tables 8-2, 8-3, and 8-4 show recommended funding by each project type, overall project type, and time period. A summary of each project type is provided below.

### **Bridge Maintenance**

The preservation of federal-aid eligible bridges represents the largest share of recommended projects. This is in recognition of their importance to the transportation system: a closed bridge can delay response times for emergency responders, disrupt the movement of goods, and greatly diminish personal mobility. It is for these reasons that the Council has placed special attention to the maintenance needs of State, County, and local bridges, allocating 40 percent of available funds to bridge maintenance activities.

The majority of recommended bridge maintenance projects are rehabilitation projects that are needed to preserve the structure; this is markedly different than replacing or reconstructing a bridge. Bridge rehabilitation work costs substantially less than replacement, and since there is insufficient funding to replace a large number of bridges, the Council must pursue a preservation-based approach focused on rehabilitation activities such as sealing or replacing a deck, cleaning and painting, replacing bearings, and rehabilitating piers, columns, and beams. In some cases the responsible agency may deem that a bridge replacement is needed to maintain public safety. However, it is difficult to identify which

bridges will require replacement, especially during the long-range period.



*Preserving local bridges, as done for Mill Lane above in Pleasant Valley, is a key objective for Moving Dutchess (Source: Dutchess County DPW).*

In order to estimate the funding needed to preserve federal-aid eligible bridges, a rehabilitation cost of \$13,000 per foot was applied to the length of each bridge. The bridges were then prioritized based on their condition, unless specified otherwise by the responsible agency. During the short-range period, bridges that are currently deemed structurally deficient and have a NYSDOT condition rating of 4.4 or lower are recommended for replacement; bridges that are not structurally deficient but have a condition rating of 4.4 or lower are recommended for rehabilitation. In order to account for the deterioration of facilities over time and to determine future funding needs, bridges with a NYSDOT condition rating of 4.5 to 5.0 are recommended for rehabilitation during the

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mid-range period, while those rated above 5.0 are recommended for rehabilitation during the long-range period. For planning purposes, this assumes that bridges will degrade at the same rate over time.

The Council recognizes that the method used to prioritize bridge maintenance activities is general in nature. As per guidance issued by NYSDOT for the SFY 2012-2016 Program Update, other factors such as traffic volumes and detour lengths should also be considered in the timing of bridge repairs. Therefore, the time period associated with each recommendation should be viewed as a general reference, rather than a binding timeframe. The ultimate responsibility for the timing of a project rests with the responsible agency.

The rehabilitation of federal-aid eligible bridges in Dutchess County is estimated to cost over \$607 million during the planning period. This represents 40 percent of the highway and bridge funding assumed to be available during the 29 year planning period. This share may increase if it is determined that some bridges require major rehabilitation or replacement. The recommended time period for some bridge maintenance projects may also change based on agency priorities or if it is deemed that work is not yet required.

In addition to maintaining State, County, and local bridges, the continued maintenance of NYSBA-operated bridges is also critical to the county's transportation system. One of the most significant projects planned in the next 20 years is the replacement of decks for both spans of the Newburgh-Beacon Bridge, which is estimated to cost \$140 million.

### **Highway Maintenance**

*Moving Dutchess* recommends 24 highway maintenance projects for federal-aid eligible roads, along with 6 non-federal aid highway maintenance projects. These projects entail rehabilitation work to repair road segments that are rated in poor condition. Due to funding constraints, the Council must pursue a preservation-based approach focused on minor corrective actions. This rehabilitation work includes single and multi-course overlays, minor surface treatments, and joint repairs. The reconstruction of roads is not recommended unless the responsible agency deems it necessary to ensure public safety. The recommended highway maintenance projects include some non-federal aid eligible projects, which are shown for information purposes only.



*Routine repaving activities, seen here on CR 17 (Salt Point Turnpike) in Clinton, make up a large share of the highway maintenance recommendations in Moving Dutchess (Source: Dutchess County DPW).*

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The highway maintenance projects are prioritized based on pavement condition data collected by NYSDOT and the Dutchess County Department of Public Works. During the short-range period, State roads with a NYSDOT rating of 5 or less and federal-aid eligible County roads with a PCI rating of 55 or less are recommended for rehabilitation. In order to account for the deterioration of facilities over time, State roads with a NYSDOT condition rating of 6 and federal-aid eligible County roads with a Pavement Condition Index rating of 56 to 75 are recommended for rehabilitation during the mid-range period, while the remaining roads, currently rated in good or excellent condition, are recommended for long-range rehabilitation. For planning purposes, this assumes that the roads will degrade at the same rate over time. The recommendations also include typical highway maintenance activities necessary to preserve the road network including the replacement of traffic signals and signs, new pavement markings, guiderail replacement, and drainage/culvert repairs.

The minor rehabilitation and maintenance of federal-aid eligible roads in Dutchess County is estimated to cost over \$400 million during the planning period. This represents 26.5 percent of the highway and bridge funding assumed to be available. This share may increase if some roads require major rehabilitation work or reconstruction. The rehabilitation of non-federal aid eligible roads is estimated to cost an additional \$160 million over the planning period.

### **Highway Operations**

*Moving Dutchess* recommends 27 projects and studies to improve highway operations in Dutchess County. These include projects that reduce traffic congestion and improve safety by redesigning intersections, adding turn lanes, upgrading/retiming traffic signals, or rerouting traffic. The recommendations include a program to regularly review State and County signal timings and a number of proposed traffic signal warrant analyses and intersection studies.



*In 2008 NYSDOT redesigned Route 376 (Raymond Ave) in the Town of Poughkeepsie to reduce travel lanes and add roundabouts, lighting, and landscaping (Source: NYSDOT).*

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Some of the larger operations projects include reconstructing the I-84/Route 9D intersection in Fishkill, redesigning the Route 55 corridor between CR 47 (Freedom Rd) and Stringham Rd in LaGrange, and converting Market St from one-way to two-way traffic in the City of Poughkeepsie. These and other highway operations projects and studies are estimated to cost almost \$88 million during the planning period, which represents six percent of the highway and bridge funding estimated to be available.

While not specified in the list of recommendations, access management practices such as consolidation of driveways, cross-parcel access and shared parking were common themes at the public meetings and are local priorities. Access management reduces congestion and increases safety on major streets by reducing the number of entrances and exits, simplifying turning movements, and encouraging direct access between parcels. Ultimately, implementation of access management depends on consistent local policies and land use decisions.

Another trend in highway operations is the use of roundabouts. Roundabouts reduce congestion and increase safety by eliminating left turn conflicts and forcing slower speeds at intersections while allowing continuous movement through the intersection. Roundabouts have been installed on Route 376 in the Town of Poughkeepsie and are being considered at several other locations in the county. Both access management and roundabouts are recommended by FHWA as proven safety countermeasures.

### **Pedestrian/Bicycle**

Ensuring the safety of pedestrians and bicyclists by maintaining and adding non-motorized infrastructure is an essential component of developing a complete transportation system. *Moving Dutchess* recommends 21 pedestrian and bicycle projects, including the construction of new sidewalks and trails, repairing existing sidewalks, and adding crosswalks and signage at key locations.

An important long-range recommendation in *Moving Dutchess* is the repair or improvement of sidewalks at locations with heavy pedestrian activity. The plan sets aside \$29 million to carryout this work, which is estimated to repair 10 miles of sidewalks. Locations would be determined from the sidewalk studies performed by the Council.

Other important pedestrian and bicycle recommendations include the completion of Stage 4 of the Dutchess Rail Trail in the Town of Poughkeepsie and the Harlem Valley Rail Trail in North East, and the construction of new sidewalks on Route 9 in the Town of Poughkeepsie and the Villages of Rhinebeck and Wappingers Falls.

The pedestrian and bicycle recommendations are estimated to cost \$81 million during the planning period, which represents five percent of the highway and bridge funding estimated to be available.

### **Safety**

Although most of the recommendations in *Moving Dutchess* are not listed under safety, they are all intended to improve transportation safety, whether for motorists, walkers, transit customers, or bicyclists. One could argue that all of the recommendations are safety projects: a repaired sidewalk removes a tripping hazard, a new turn lane prevents a rear-end collision, a fixed pothole keeps a vehicle in its travel lane, and a new bus makes it easier for a customer to board. All of the recommendations should therefore be viewed as having a safety component.

*Moving Dutchess* recommends 12 safety-oriented, federal-aid eligible projects. These include one of the largest and most expensive transportation projects in Dutchess County: the reconstruction of the Route 9/44/55 interchange in the City of Poughkeepsie, at an estimated cost of \$76 million. Another important safety project is the construction of a grade-separated intersection at Taconic State Parkway/Rossway Rd-Tyrell Rd in Pleasant Valley, which has an estimated cost of \$40 million. Other safety projects include realigning roads, installing traffic warning signals, improving sight distances at intersections, installing traffic calming devices at various locations, and conducting road safety audits at areas of concern.

The safety recommendations will cost an estimated approximately \$132 million during the planning period, which represents nine percent of highway and bridge funding estimated to be available.

### **Planning Studies**

*Moving Dutchess* recommends a variety of planning studies to analyze transportation issues in communities, sub-areas, and major corridors. These studies require detailed analyses that are more precise than the system-level analysis done for this long range plan.

Recommended planning studies include sidewalk inventories and improvement studies for the County's cities, villages, and town centers. These studies will use the 2011 Village of Rhinebeck Sidewalk Study as a template, where Council and Dutchess County Planning Department staff worked in conjunction with local officials and volunteers to develop a strategy to improve and repair pedestrian facilities. Other recommended studies include Corridor Management Plans for Routes 9D and 9G (scopes to be determined) and an update to the Council's 1996 Bicycle and Pedestrian Plan. Lastly, as discussed in Chapter 3, a regional transit study is recommended for the TMA.

The planning studies are estimated to cost \$2.2 million during the planning period, which is less than one percent of available funding. Many of these studies would be supported by planning funds programmed by the Council through its annual UPWP.

### **Transit**

Bus and rail transit play a critical role in our transportation system, providing mobility to those who cannot or choose not to drive, while providing convenient access to regional

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employment and commercial centers. The 30 federal-aid eligible transit recommendations support existing bus and rail service in the area and the possible expansion of bus service to new areas.

The recommendations include short-, mid-, and long-range projects to maintain and operate the two public bus systems (Dutchess County and City of Poughkeepsie). These projects cover preventive maintenance, operating assistance, and vehicle replacements for each operator during each time period. The recommendations were based on the estimated needs of each operator, including vehicle and equipment replacement schedules. The cost estimates for these projects were based on current annual costs adjusted by YOE and multiplied by the number of years in each time period.

Other recommended projects include the installation of bus stop shelters to improve passenger comfort, the use of technology to increase the availability of transit information, and the construction of a transit hub on Market Street in the City of Poughkeepsie. Specific commuter rail recommendations include current TIP projects to expand parking at the Beacon and Wassaic train stations and rehabilitation of the Poughkeepsie train station.

As a subsidiary of the Metropolitan Transportation Authority (MTA), Metro-North Railroad projects are included in the MTA's Capital Program. MTA's 2010-2014 Capital Program identifies over \$1.7 billion in projects to improve Metro-North service, including the purchase of new rolling stock (locomotives and cars), signal and power improvements to



*Preventive maintenance activities represent a substantial amount of the transit funding recommended in Moving Dutchess (Source: Dutchess County Mass Transit).*

meet Positive Train Control requirements, the continued rehabilitation of stations, and track maintenance. The MTA is in the process of developing a 20-Year Capital Needs Assessment (2015-2034), which identifies \$11.8 billion in system-wide capital needs for Metro-North. These needs are required to maintain a state of good repair and support projects such as replacing rolling stock and maintaining track. Metro-North Railroad projects are not included in the project recommendations unless they are specific to Dutchess County.

The transit recommendations specific to Dutchess County are estimated to cost almost \$192 million during the planning period; this represents 13 percent of all funding estimated to be available.

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### **Travel Demand Management**

*Moving Dutchess* recommends continuing Travel Demand Management (TDM) activities aimed at reducing the number of single-occupant vehicles on major road corridors. These activities include the promotion of ridesharing such as carpools and vanpools through information technology and van leasing programs. The recommendation supports the continuation of the 511NYRideshare program, which provides an information portal to match commuters with similar origins and destinations. Based on an annual cost of \$225,000, the estimated total cost for TDM activities is \$6.5 million during the planning period.

### **Air Quality Conformity**

In accordance with the Clean Air Act Amendments of 1990, SAFETEA-LU, and the New York State Implementation Plan (SIP) for air quality, the Council, in conjunction with the New York Metropolitan Transportation Council (NYMTC) and Orange County Transportation Council (OCTC), completed a joint air quality conformity determination statement for *Moving Dutchess*. The three MPOs are responsible for the Poughkeepsie Ozone Non-attainment Area, which includes Dutchess, Orange, and Putnam counties.

The conformity determination relied on a regional emissions analysis that used forecasted travel data from each MPO's travel demand model. The models estimated Vehicle Miles of Travel (VMT) based on changes in population, housing, and employment during the 29-year planning period, and network changes resulting from the projects in each Plan and TIP. Each

MPO calculated VMT and regional emissions for five milestone years: 2014, 2020, 2030, 2035, and 2040; and two pollutants: Volatile Organic Compounds and Oxides of Nitrogen. The regional emissions analysis and recommended projects were reviewed by the State's Interagency Consultation Group.

The conformity determination determined that the projects and recommendations in the Plans and TIPs of each MPO achieve and maintain National Ambient Air Quality Standards (NAAQS). Appendix F includes the complete conformity determination statement.

### **Unfunded Project Concepts**

During the development of *Moving Dutchess*, a variety of project concepts were identified from local comprehensive plans, previous studies, and from suggestions by local officials and the public. Due to funding constraints, these concepts are not identified as recommendations, but are included for illustrative purposes only. Many require further study to determine their merit, while others require more defined scopes and purposes. This is especially true for highway capacity improvements, which cost considerably more than simple highway maintenance activities; capacity improvements also require detailed air quality analyses to ensure they do not worsen the region's air quality. The project concepts were not included in the regional emissions analysis discussed earlier. Appendix E lists the Unfunded Project Concepts identified during the development of *Moving Dutchess*.

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### **Financial Plan**

SAFETEA-LU requires that the projects recommended in *Moving Dutchess* be financially constrained. Financial constraint is demonstrated through a financial plan that shows how the projects can be funded based on estimates of current and reasonably available future revenues. The plan must also demonstrate that the federally-supported transportation system is being adequately operated and maintained. It is extremely difficult to predict future funding since there is a great deal of debate about the role of the federal government in supporting the local transportation system. There is equal uncertainty about the future of State and local funding. Despite these uncertainties, *Moving Dutchess* assumes that federal, State, and local entities will dedicate sufficient funds to preserve the transportation system to maintain safety and mobility.

The financial plan uses three funding scenarios, tied to the three time periods used to prioritize recommendations:

1. Short-range (2012-2015): This scenario assumes that annual federal, State, and local transportation funding will remain flat at 2011 levels for the next four years, based on the most recent funding targets for the 2011-2015 TIP. However, additional transportation funding is possible through federal job creation measures and the multi-year federal transportation law that succeeds SAFETEA-LU.
2. Mid-range (2016-2025): This scenario assumes that federal, State, and local transportation funding will increase at the same rate as inflation (assumed to be 3

percent annually) over the period. This would raise the annual allocations to pre-2011 levels by 2020.

3. Long-range (2026-2040): This scenario assumes that federal, State, and local funding will continue to increase at the same rate as inflation (assumed to be 3 percent annually) over the period.

### **Available Funding**

The Council relied on current and historic funding allocations to estimate the amount of highway, transit, and planning funds available over the *Moving Dutchess* planning period. Though there are numerous federal funding programs (87 in SAFETEA-LU alone), the financial plan focuses on the major surface programs. Based on indications from Congress, the Council assumes that the next federal surface transportation act will consolidate the many federal programs into a few, providing agencies the flexibility needed to preserve the system. For example, the Council assumes that the Highway Bridge Rehabilitation (HBR) program will be consolidated with the current Surface Transportation Program (STP), creating a single, broader program focused on highway and bridge maintenance.

The Council estimated future funding for three broad project categories: highway, transit, and planning. Table 8-5 shows available funding by project type and source for each time period.

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### Estimated Federal, State, & Local Highway Funds

The federal Highway Trust Fund (HTF), supplemented by some general funds, provides the majority of federal highway and transit funding to states. The HTF was created in 1956 as a user-supported fund, and modified in 1982 to include a Mass Transit Account to support transit. HTF revenues come from user fees on gasoline, diesel, special fuels, tires, and large trucks. The current fees, last updated in 1993, include a gasoline tax of 18.4 cents per gallon and a diesel tax of 24.4 cents per gallon. Funding from the HTF is administered through FHWA by the states and used to maintain federal-aid eligible highways and other transportation facilities.

For *Moving Dutchess*, the Council used highway funding targets established by NYSDOT in August 2011. Though primarily developed for the NYSDOT 2012-2016 Capital Program Update, the targets provide a good estimate of the federal and State highway funding that will be available during the 2012-2015 period. Reflecting the uncertainty about federal funding, the targets assume annual funding will stay at FFY 2011 levels. From FFY 2012-2015, the funding target for NYSDOT Region 8 averages approximately \$213 million per year: \$131 million in federal funds and \$82 million in State funds.

To establish targets for the counties, Region 8 used a fair-share formula based on population and system data such as bridge conditions and lane mileage. Consistent with past practice, approximately 14 percent of the Region's total is oriented towards the federal-aid highway system in Dutchess

County. This equates to an annual target of \$30 million. Of this total, 60 percent (\$18 million) is federal and 40 percent (\$12 million) is State. Though federal funding requires a 20 percent local match, the State has typically made up 15 percent of this match. Therefore, assuming a 5 percent local match, an additional \$1 million in local highway funding is assumed to be available. This raises the total amount of available federal-aid highway funding to \$31 million per year for the short-range period (\$124 million total). This is the amount of federal, State, and local highway funding assumed to be available to NYSDOT, Dutchess County, and local municipalities to preserve the federal-aid highway system from 2012-2015.

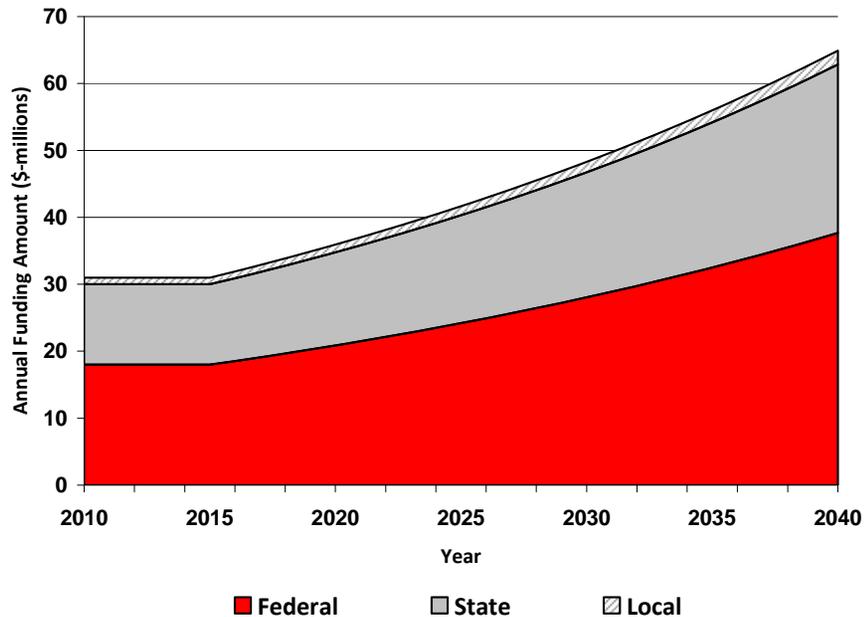
The estimated highway funding during the mid-range period (2016-2025) assumes that a new federal transportation act will be in place and the annual \$31 million target will start to increase at the rate of inflation in 2016. The average annual amount of highway funding available during this period is approximately \$37 million (\$22 million federal, \$14 State, and \$1 million local). This would raise the annual amount of highway funding to pre-2011 levels. A total of \$366 million in highway funding is assumed to be available during the 10-year period (approximately \$213 million federal, \$142 million State, and \$12 million local).

The estimated highway funding during the long-range period (2026-2040) assumes that the annual amount of highway funding continues to increase at the rate of inflation. No other increases are assumed. The average annual amount of highway funding available during this period is approximately \$53 million (\$32 million federal, \$19 million State, and \$2

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million local). A total of \$798 million in highway funding is assumed to be available during the 15-year period (\$463 million federal, \$309 million State, and \$26 million local). Figure 8-2 shows the annual amount of estimated highway funding by source.

Figure 8-2. Annual Amount of Estimated Highway Funding by Source



Over the entire planning period (2012-2040), the Council estimates that approximately \$1.29 billion (\$748 million federal, \$499 million State, and \$42 million local) in highway funding will be available for the federal-aid system. This is 42 percent less than the amount of highway funding estimated in the previous MTP, which reflects the financial challenges facing federal, State, and local governments.

The estimated highway funding does not include sources such as the State's Consolidated Local Street and Highway Improvement Program (CHIPS) or local general funds. The Council assumes that these funds will be used on the non-federal aid system. For the Dutchess County Department of

Public Works alone, these sources would make approximately \$116 million available over the planning period (\$4 million per year) to maintain non-federal aid eligible roads.

### Estimated Federal, State, & Local Transit Funds

Future transit funding was estimated by totaling the federal, State, and local funding available per year based on historic allocations and revenues, and extrapolating those amounts over the planning period.

Federal transit funds are administered by the FTA and apportioned to the Poughkeepsie-Newburgh Urbanized Area as a whole, based on statistics reported through the National Transit Database (NTD). The annual FTA apportionment does not directly allocate funding to transit operators; instead, this responsibility rests with the three MPOs of the Mid-Hudson Valley TMA, assisted by the NYSDOT-Public Transportation Bureau.

Each year the NYSDOT-Public Transportation Bureau provides transit funding allocations to the Mid-Hudson Valley TMA. The allocations cover two federal programs: the FTA Section 5307 (Urbanized Area) and 5340 (Growing States/High Density States) formula programs. From 2009-2011, these allocations

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averaged \$17.4 million per year for the Urbanized Area. Of this amount, the County's two local public bus operators (Dutchess County and the City of Poughkeepsie) typically received a combined \$2 million (\$1.5 million and \$500,000 respectively) per year. The TMA allocations also include funding for MTA/Metro-North Railroad for transit services provided in the urbanized area (approximately \$2.5 million annually).

In addition to federal funding, the State provides operating assistance to public bus operators, referred to as STOA. This is a formula-based program that reimburses operators 40.5 cents per passenger and 0.69 cents per vehicle mile. Dutchess County and the City of Poughkeepsie receive approximately \$2.4 million per year in STOA (\$2 million and \$400,000 respectively).

Besides federal and State funding, the two operators receive assistance through their local governments. These include local matches to federal funds (usually 10 percent) and general funds from annual budgets. These total approximately \$2.2 million per year. The operators also use fare revenue to help maintain their systems, which is an additional \$1 million per year (\$700,000 for Dutchess and \$300,000 for Poughkeepsie).

Based on recent federal, State, and local funding and fare revenues, the Council estimates that \$7.6 million will be available annually for local public bus systems; this assumes that the recent trend of flat funding will continue. Based on this annual amount, over \$30 million in transit funding would

be available during the short-range period (2012-2015), \$76 million during the mid-range period (2016-2025) and \$114 million during the long-range period (2026-2040). This represents a total of \$220 million available over the planning period. This does not include an estimated \$73 million in FTA Section 5307 funding that would be allocated to MTA/Metro-North Railroad during the planning period for services in the urbanized area.

### Estimated Planning Funds

As with highway and transit funding, the Council estimated future planning funds by extrapolating recent annual allocations over the 29-year planning period. The Council receives federal planning funds that are matched by State and local funds. These funds are used to carry out the metropolitan transportation planning process, as prescribed by the FHWA and FTA. The funds are allocated on an annual basis and programmed through the Council's UPWP, which identifies the federally-funded planning activities to be carried out by the Council in a given year.

Federal funding used to support UPWP tasks comes from two sources: Federal Highway Administration (FHWA) Planning (PL) funds and Federal Transit Administration (FTA) Section 5303 Metropolitan Planning Program (MPP) funds. NYSDOT and Dutchess County provide matching funds (15 and 5 percent respectively).

The amount of federal funding authorized for transportation planning has remained constant in recent years. In 2011-2012,

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New York State received \$31.7 million in federal planning funds. These funds were allocated to the 13 MPOs in the state through a formula that accounts for the size of each MPO planning area.

The Council's 2011-2012 federal funding allocation totaled \$642,845 (\$528,372 in FHWA funding and \$114,473 in FTA funding). The State and local match for these funds totaled over \$160,700, making approximately \$800,000 available for planning activities during the year. The Council does not anticipate that these annual allocations will change significantly over the planning period, since planning funds have remained relatively flat in recent years. Therefore, it is estimated that \$23.2 million will be available for planning activities during the planning period.

In addition to the annual allocation of federal planning funds, the Council has unspent funds available from previous program budgets. These are funds that were apportioned to the Council but not expended during a particular program year. As of August 2011, the estimated savings is approximately \$642,000. This increases the estimated amount of available planning funds to \$23.8 million from 2012-2040.

### **Regional Transportation Authorities**

#### **MTA/Metro-North Railroad Funding**

The MTA/Metro-North Railroad receives revenue from the FTA, MTA bonds, ticket sales, rents, and local subsidies. These are used to support capital and operating expenses. As mentioned, the MTA has developed a 20-year Capital Needs

Assessment (2015-2034) and a 2010-2014 Capital Program that identify investments and projects needed to maintain and improve passenger transportation services. The MTA's 2012 budget and 2012-2015 Financial Plan/Capital Program, both of which will be proposed to the MTA Board in November 2011 and adopted in December 2011, seek to maximize revenues and establish fiscal stability for the MTA. The preliminary 2012-2015 Financial Plan continues cost cutting initiatives begun in 2010, which are projected to save \$3.8 billion by 2014. When implemented, the new Financial Plan will achieve stability without reducing service. The MTA's 2010-2014 Capital Program, which invests in renewing MTA's infrastructure and expanding the transportation network to meet future demand, is integral to MTA's ability to deliver services. The Financial Plan presents a strategy to fully fund the MTA's 2010-2014 capital program.

#### **New York State Bridge Authority**

The New York State Bridge Authority is a wholly self-supporting public benefit corporation that relies on toll revenues to meet its operational, maintenance, and capital improvement needs. In 2009, tolls accounted for 99 percent of all NYSBA revenues (\$37 million). Standard passenger car tolls will increase on January 1, 2012 from \$1.00 to \$1.25 per vehicle (paid at eastbound crossings). The NYSBA's 2011-2014 Financial Plan estimates that revenues will reach \$39 million for 2011, while expenses will total \$55 million. Though a shortfall is expected for 2011, 2012 shows a funding surplus based on debt proceeds and toll increases. The Financial Plan includes the sale of \$140 million in bonds to begin re-decking

## ***Moving Dutchess***

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the south span of the Newburgh-Beacon Bridge.

### **Private Funds**

The funds estimated to be available over the planning period do not include potential funding from private entities. Although the Council has not identified private funds, it recommends that they be used to the maximum extent possible to fund transportation improvements, particularly those related to new development, such as intersection or signal improvements for large residential and commercial projects.

### **Fiscal Constraint Analysis**

*Moving Dutchess* recommends the investment of \$1.5 billion in highway, transit, and planning projects to preserve, maintain, and improve Dutchess County's transportation system over a 29-year planning period. The overall estimate of reasonably expected revenues total over \$1.5 billion, which is sufficient to carry out the majority of the plan's recommendations. A shortfall does exist between available and recommended funding for highway and bridge projects during the mid-range period, which is partially offset by a balance during the long-range period; since the overall imbalance represents one percent of available funding, it is not deemed significant. Fiscal constraint for *Moving Dutchess* is predicated on several key assumptions:

1. Federal and State transportation funding will need to track the rate of inflation in order for agencies to effectively preserve the transportation system, let alone maintain a

state of good repair. If labor or material costs increase at a faster rate than funding, agencies will be forced to delay projects or even close non-strategic transportation facilities. The strategic divestment of facilities is the least preferred alternative, but may be required if the Council's funding estimates prove too high.

2. Federal transportation funding programs will need to be grouped into a smaller group of core programs, providing flexibility to the State and local agencies to program funds where needed. A consolidated program has been proposed for the federal transportation law that will succeed SAFETEA-LU. This consolidation is essential for the preservation of the system, since the existing distribution of transportation funding diverts resources away from core preservation activities. The Council may need to revisit the recommendations in *Moving Dutchess*, if the next reauthorization law does not consolidate existing surface transportation programs or provide the flexibility needed to effectively preserve the transportation system.
3. *Moving Dutchess* outlines a preservation based approach to maintain transportation safety and mobility. If a large number of facilities require major rehabilitation work or reconstruction, agencies may need to postpone lesser priority projects. To be clear, there is insufficient funding available to reconstruct the majority of the system or reach a true state of good repair. The Council will rely on individual agencies to identify which facilities require work beyond preservation.

## ***Moving Dutchess***

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4. Although the current estimate of available funding is sufficient to preserve the transportation system, the sheer number of recommended projects may prove challenging for agencies to process. In order to move projects forward, agencies will likely need to bundle maintenance activities into system-wide, cyclical maintenance projects that can be more easily reviewed and processed by federal and State reviewing agencies. These projects will need to be designed in a manner that reduces the need to acquire right-of-way, which is often a time consuming and expensive phase. Project delivery could be further expedited by certifying staff at the local level (e.g. County) to administer federal-aid projects, so they can assist the NYSDOT-Region 8 Local Projects Unit in processing projects.

the area's priorities, latest planning assumptions, and most current funding estimates.

Tables 8-6 and 8-7 summarize the financial constraint analysis.

### **Final Thoughts**

*Moving Dutchess* provides a strategy to meet the transportation needs of Dutchess County. The Council developed this strategy through a review of existing guidance, input from State and local agencies, and an analysis of transportation system data. In a departure from the previous plan, this strategy relies on project-level recommendations. The Council pursued this approach to increase the value of the plan to decision-makers and the public, and to better position the Council to address emerging federal priorities related to performance based planning and livability. The Council will update *Moving Dutchess* in four years and revisit the recommendations to ensure that they are still valid and reflect

Table 8-1. Moving Dutchess: Recommended Projects (Non-bridge Maintenance) (2012-2040)

MTP ID#	Project Description/Recommendation <sup>1</sup>	Project Type	Area <sup>2</sup>	Location	Time Frame <sup>3</sup>	Est Cost (2011) <sup>4</sup>	Est Cost (YOE) <sup>5</sup>	Fed-Aid Eligible <sup>6</sup>	Project Sponsor	TIP Status <sup>7</sup>	Air Quality Code <sup>8</sup>
HM-1	Repave NYSDOT road segments currently rated in "Poor" condition (NYSDOT surface rating of 5 or less) (24 miles total)	Highway-Maintenance	ALL	Dutchess County	Short-Range	\$7,200,000	\$8,100,000	Yes	NYSDOT	Yes	A10
HM-2	Repave Dutchess County Federal-aid eligible road segments currently rated in "Poor" condition (6 miles)	Highway-Maintenance	ALL	Dutchess County	Short-Range	\$1,800,000	\$2,030,000	Yes	DCDPW	No	A10
HM-3	Drainage repairs to alleviate flooding on CR 41 (Crum Elbow Rd) between Cardinal Rd and Matuk Dr	Highway-Maintenance	UH	Hyde Park	Short-Range	\$1,000,000	\$1,000,000	Yes	DCDPW	No	A2
HM-4	Repave North Water St and redesign the street to incorporate a sidewalk or bicycle/pedestrian path: Main St to Dutchess Ave (0.4 miles)	Highway-Maintenance	LH	Poughkeepsie City	Short-Range	\$240,000	\$270,000	Yes	Poughkeepsie City	No	A10
HM-5	Repave Cannon St: Market St to Wood Ln (0.1 miles)	Highway-Maintenance	LH	Poughkeepsie City	Short-Range	\$18,000	\$20,000	Yes	Poughkeepsie City	No	A10
HM-6	Repave Civic Center Plaza: Main St to Mill St (0.1 miles) (See also OP-21)	Highway-Maintenance	LH	Poughkeepsie City	Short-Range	\$33,000	\$37,000	Yes	Poughkeepsie City	No	A10
HM-7	Repave Dutchess Ave: Hudson River to N Water St (0.1 miles)	Highway-Maintenance	LH	Poughkeepsie City	Short-Range	\$36,000	\$41,000	No	Poughkeepsie City	No	A10
HM-8	Repave Kittedge Pl: Dutchess Av to Route 9 (0.3 miles)	Highway-Maintenance	LH	Poughkeepsie City	Short-Range	\$78,000	\$88,000	Yes	Poughkeepsie City	No	A10
HM-9	Repave Livingston St: Lincoln Av to Academy St (0.2 miles)	Highway-Maintenance	LH	Poughkeepsie City	Short-Range	\$51,000	\$57,000	Yes	Poughkeepsie City	No	A10
HM-10	Repave Main St: cul-de-sac to Poughkeepsie Town Line, and S Clover St to Market St (1.5 miles)	Highway-Maintenance	LH	Poughkeepsie City	Short-Range	\$438,000	\$493,000	Yes	Poughkeepsie City	No	A10
HM-11	Repave Sharon Dr: Beechwood Ave to Poughkeepsie Town Line (0.1 miles)	Highway-Maintenance	LH	Poughkeepsie City	Short-Range	\$349,000	\$393,000	Yes	Poughkeepsie City	No	A10
HM-12	Repave Washington St: Mansion St to Parker Ave (0.2 miles)	Highway-Maintenance	LH	Poughkeepsie City	Short-Range	\$72,000	\$81,000	Yes	Poughkeepsie City	No	A10
HM-13	Repave Spring Rd: Route 9 to CR 77 (Vassar Rd) (0.7 miles)	Highway-Maintenance	LH	Poughkeepsie Town	Short-Range	\$2,225,000	\$2,225,000	Yes	Poughkeepsie Town	Yes	A10
HM-14	Repave Route 82 in Union Vale: O'Brien Hill Rd to CR 9 (Clove Rd) (1 mile)	Highway-Maintenance	LT	Union Vale	Short-Range	\$300,000	\$338,000	Yes	NYSDOT	No	A10
HM-15	Repave CR 93 (Middlebush Rd): Pleasant Ln to Cameli Dr (0.1 miles)	Highway-Maintenance	LH	Wappinger	Short-Range	\$1,250,000	\$1,250,000	Yes	DCDPW	Yes	A10
HM-16	Repave Market St in the Village of Wappingers Falls: East Main St to Creek Rd (0.6 miles)	Highway-Maintenance	LH	Wappingers Falls	Short-Range	\$177,000	\$199,000	Yes	Wappingers Falls	No	A10
HM-17	Repave North Mesier Ave: Route 9 to East Main St (0.5 miles)	Highway-Maintenance	LH	Wappingers Falls	Short-Range	\$144,000	\$158,000	No	Wappingers Falls	No	A10
HM-18	Repave Nelson Ave: Delavergne Ave to Clinton St (0.2 miles)	Highway-Maintenance	LH	Wappingers Falls	Short-Range	\$150,000	\$169,000	No	Wappingers Falls	No	A10
HM-19	Repave Route 44 in Washington: Deep Hollow Rd to the Amenia town line (1.5 miles)	Highway-Maintenance	UT	Washington	Short-Range	\$450,000	\$507,000	Yes	NYSDOT	No	A10
HM-20	Taconic State Parkway Pavement Rehabilitation: Hortontown Hill Rd (Putnam Co.) to Miller Hill Rd	Highway-Maintenance	LT	East Fishkill	Short-Range	\$4,350,000	\$4,350,000	Yes	NYSDOT	Yes	A10
HM-21	I-84 Pavement Rehabilitation: Route 9 to Taconic State Parkway	Highway-Maintenance	LT	Fishkill & East Fishkill	Short-Range	\$7,396,000	\$7,396,000	Yes	NYSDOT	Yes	A10
HM-22	NYSDOT-Region 8 highway maintenance activities to include traffic signal/sign replacements, new pavement markings, guiderail replacements, and culvert repairs (estimated cost shows total cost for planning period based on an annual cost of \$2 million)	Highway-Maintenance	ALL	Dutchess County	Short, Mid, and Long-Range	\$58,000,000	\$93,000,000	Yes	NYSDOT	Yes	A9, A11, C13, D2
HM-23	Dutchess County DPW highway maintenance activities to include traffic signal replacements, guiderail replacements, and drainage/culvert repairs (estimated cost shows total cost for planning period based on an annual cost of \$500,000)	Highway-Maintenance	ALL	Dutchess County	Short, Mid, and Long-Range	\$14,500,000	\$23,000,000	Yes	DCDPW	Yes	A9, A11, C13, D2
HM-24	Reconstruct CR 78 (Broadway): Montgomery St to Bridge RH-25 (0.1 miles)	Highway-Maintenance	UH	Tivoli Village	Mid-Range	\$300,000	\$391,000	No	DCDPW	No	A10
HM-25	Repave NYSDOT road segments currently rated in "Fair" condition (NYSDOT surface rating of 6), projected to be in "Poor" condition by 2025 (124 miles total)	Highway-Maintenance	ALL	Dutchess County	Mid-Range	\$37,200,000	\$48,500,000	Yes	NYSDOT	No	A10
HM-26	Repave Dutchess County Federal-aid eligible road segments currently rated in "Fair" condition (projected to be in "Poor" condition by 2025) (7 miles total)	Highway-Maintenance	ALL	Dutchess County	Mid-Range	\$2,100,000	\$2,740,000	Yes	DCDPW	No	A10
HM-27	Repave Dutchess County Non-federal aid eligible road segments currently rated in "Fair" condition (projected to be in "Poor" condition by 2025) (47 miles total)	Highway-Maintenance	ALL	Dutchess County	Mid-Range	\$14,100,000	\$18,400,000	No	DCDPW	No	A10
HM-28	Repave NYSDOT road segments currently rated in "Excellent" or "Good" condition (NYSDOT surface rating of 7 or above), projected to be in "Poor" condition by 2040 (approx. 275 miles total)	Highway-Maintenance	ALL	Dutchess County	Long-Range	\$75,000,000	\$152,500,000	Yes	NYSDOT	No	A10
HM-29	Repave Dutchess County Federal-aid eligible road segments currently rated in "Excellent" or "Good" condition (projected to be in "Poor" condition by 2040) (85 miles total)	Highway-Maintenance	ALL	Dutchess County	Long-Range	\$25,500,000	\$51,800,000	Yes	DCDPW	No	A10
HM-30	Repave Dutchess County Non-federal aid eligible road segments currently rated in "Excellent" or "Good" condition (projected to be in "Poor" condition by 2040) (232 miles total)	Highway-Maintenance	ALL	Dutchess County	Long-Range	\$69,600,000	\$141,500,000	No	DCDPW	No	A10
OP-1	Develop and implement a program to regularly review and update signal timings at major State Route intersections (using data from the TMA Travel Time Survey)	Highway-Operations	ALL	Dutchess County	Short-Range	\$100,000	\$113,000	Yes	NYSDOT	No	C3
OP-2	Develop and implement a program to regularly review and update signal timings at major County Route intersections (using data from the TMA Travel Time Survey)	Highway-Operations	ALL	Dutchess County	Short-Range	\$100,000	\$113,000	Yes	DCDPW	No	C3
OP-3	Reconstruct the Route 376/Robinson Lane intersection, adding turn lanes and upgrading traffic signal	Highway-Operations	LT	East Fishkill	Short-Range	\$1,950,000	\$1,950,000	Yes	NYSDOT	Yes	D2
OP-4	Review Route 82 and 376 signal timings in Hopewell Junction and recommend operational improvements (0.2 miles)	Highway-Operations	LT	East Fishkill	Short-Range	\$10,000	\$11,000	Yes	NYSDOT	Yes	C3
OP-5	Realign Route 82 at CR 31 (Palen Rd)/Fishkill Rd to create a 4-leg intersection with improved traffic signals and turning lanes	Highway-Operations	LT	East Fishkill	Short-Range	\$2,740,000	\$2,740,000	Yes	NYSDOT	Yes	D1
OP-6	Review and update traffic signal timings at the Route 9D/I-84 intersection to improve operations	Highway-Operations	LH	Fishkill Town	Short-Range	\$10,000	\$11,000	Yes	NYSDOT	No	D2
OP-7	Review and coordinate traffic signal timings on Route 52 between I-84 and Jackson St to improve	Highway-Operations	LH	Fishkill Village/Town	Short-Range	\$10,000	\$11,000	Yes	NYSDOT	No	C3
OP-8	Reconstruct the CR 21 (Noxon Rd)/CR 49 (Titusville Rd) intersection, adding turn lanes and upgrading traffic signals	Highway-Operations	LT	LaGrange	Short-Range	\$1,823,000	\$1,823,000	Yes	DCDPW	Yes	D3
OP-9	Add turning lanes on Route 22 at Haight Rd in both directions (northbound left turn and southbound right turn) to assist school buses going to Haight Rd	Highway-Operations	HV	North East	Short-Range	\$250,000	\$281,000	Yes	NYSDOT	No	D1
OP-10	Intersection improvements at the NYS Route 115/CR 71 (West Rd) intersection	Highway-Operations	UT	Pleasant Valley	Short-Range	\$1,200,000	\$1,200,000	Yes	DCDPW	No	C3
OP-11	Conduct a traffic signal warrant analysis at the Route 44/Route 82 intersection	Highway-Operations	UT	Pleasant Valley	Short-Range	\$5,000	\$6,000	Yes	NYSDOT	No	C3
OP-12	Intersection improvements at the CR 44 (Red Oaks Mill Rd) and Walker Rd intersection	Highway-Operations	UT	LaGrange	Short-Range	\$1,100,000	\$1,100,000	Yes	DCDPW	No	C3
OP-13	Reconstruct the Creek Rd/Smith St/Little George St intersection	Highway-Operations	LH	Poughkeepsie City	Short-Range	\$1,160,000	\$1,160,000	Yes	Poughkeepsie City	Yes	D1
OP-14	Replace or install traffic signals on Washington Street at Clark St, Bain Ave/Orchard Pl, Verazzano Blvd/Brookside Ave, Mansion St, and Parker Ave	Highway-Operations	LH	Poughkeepsie City	Mid-Range	\$447,000	\$447,000	Yes	Poughkeepsie City	Yes	D2
OP-15	Review signal timings at the Route 9/Route 199 intersection to reduce traffic congestion	Highway-Operations	UH	Red Hook Village	Mid-Range	\$10,000	\$11,000	Yes	NYSDOT	No	C3
OP-16	Improve pavement markings at the Route 22/44/343 intersection in the Amenia hamlet and determine the feasibility of adding dedicated left-turn lanes on Routes 22 and 343	Highway-Operations	HV	Amenia	Mid-Range	\$10,000	\$13,000	Yes	NYSDOT	No	A11

Table 8-1. Moving Dutchess: Recommended Projects (Non-bridge Maintenance) (2012-2040)

MTP ID#	Project Description/Recommendation <sup>1</sup>	Project Type	Area <sup>2</sup>	Location	Time Frame <sup>3</sup>	Est Cost (2011) <sup>4</sup>	Est Cost (YOE) <sup>5</sup>	Fed-Aid Eligible <sup>6</sup>	Project Sponsor	TIP Status <sup>7</sup>	Air Quality Code <sup>8</sup>
OP-17	Conduct an intersection study to determine the need to install a second left-turn lane on Route 9D (northbound) onto the I-84 bridge to reduce peak hour congestion	Highway-Operations	LH	Fishkill Town	Mid-Range	\$50,000	\$65,000	Yes	NYS DOT	No	D1
OP-18	Add right turn lanes on East/West Market St and Rogers Pl/Park Plaza intersections	Highway-Operations	UH	Hyde Park	Mid-Range	\$250,000	\$326,000	Yes	DCDPW	No	D1
OP-19	Intersection and signal upgrades on Route 55 from CR 47 (Freedom Rd) to Stringham Rd, including a feasibility analysis for roundabouts at major intersections	Highway-Operations	LT	LaGrange	Mid-Range	\$6,600,000	\$8,600,000	Yes	NYS DOT	Yes	C7
OP-20	Add right-turn (northbound) and left-turn (southbound) lanes on Route 22 (Elm Ave) at the Route 44 (Main St) intersection	Highway-Operations	HV	Millerton Village	Mid-Range	\$250,000	\$326,000	Yes	NYS DOT	No	D1
OP-21	Replace the traffic signal at Academy St and Cannon St	Highway-Operations	LH	Poughkeepsie City	Mid-Range	\$50,000	\$65,000	Yes	Poughkeepsie City	No	D2
OP-22	Redesign Market St from a three-lane, one-way street into a two-lane, two-way street (0.25 miles)	Highway-Operations	LH	Poughkeepsie City	Mid-Range	\$4,830,000	\$6,302,000	Yes	Poughkeepsie City	No	A10
OP-23	Add a right-turn lane to southbound Route 9 at the Route 9/Route 9G intersection to improve operations	Highway-Operations	UH	Rhinebeck Town	Mid-Range	\$250,000	\$326,000	Yes	NYS DOT	No	D1
OP-24	Add left-turn lanes at the Route 9 (Montgomery/Mill St) and 308 (East/West Market St) intersection	Highway-Operations	UH	Rhinebeck Village	Mid-Range	\$500,000	\$652,000	Yes	NYS DOT	No	D1
OP-25	Conduct a feasibility analysis for a roundabout at the CR 93 (Myers Corners Rd)/CR 94 (All Angels Hill Rd) intersection	Highway-Operations	LH	Wappinger	Mid-Range	\$50,000	\$102,000	Yes	DCDPW	No	C3
OP-26	Reconstruct the Route 9D at I-84 interchange and incorporate safe pedestrian and bicycle access	Highway-Operations	LH	Fishkill Town	Long-Range	\$29,000,000	\$59,000,000	Yes	NYS DOT	No	D3
OP-27	Conduct an intersection/signal warrant analysis of Firehouse Ln (entrance to Red Hook Estates) and Route 9 to determine possibility of creating a signalized, four-way intersection	Highway-Operations	UH	Red Hook Village	Long-Range	\$25,000	\$51,000	Yes	Red Hook Village	No	C3
OP-28	Redesign the Route 9/Route 308 "Four Corners" intersection to shorten crosswalks, add diagonal parking on W. Market St, and provide pedestrian amenities	Highway-Operations	UH	Rhinebeck Village	Long-Range	\$500,000	\$1,020,000	Yes	NYS DOT	No	C2
PB-1	Complete the Dutchess Rail Trail (Stage 4) from Old Manchester Rd to Overocker Rd, including a new pedestrian bridge over Route 55	Pedestrian/Bicycle	LH	Poughkeepsie Town	Short-Range	\$9,149,000	\$9,149,000	Yes	DCDPW	Yes	C2
PB-2	Complete the Southern Poughkeepsie Waterfront (Greenway) Trail	Pedestrian/Bicycle	LH	Poughkeepsie City	Short-Range	\$832,000	\$832,000	Yes	Poughkeepsie City	Yes	C2
PB-3	Install a sidewalk on Route 22 from the Amenia Town Hall to Old North Rd (near the Freshtown shopping plaza) (2,800 feet)	Pedestrian/Bicycle	HV	Amenia	Mid-Range	\$756,000	\$986,000	Yes	NYS DOT	No	C2
PB-4	Repair State-owned, non-ADA compliant sidewalks and ramps throughout Dutchess County	Pedestrian/Bicycle	ALL	Dutchess County	Mid-Range	\$2,535,000	\$3,310,000	Yes	NYS DOT	Yes	C2
PB-5	Improve pedestrian safety crossing Route 9D at Dogwood Ln and Chiappardi Pl	Pedestrian/Bicycle	LH	Fishkill Town	Mid-Range	\$13,600	\$18,000	Yes	NYS DOT	No	C2
PB-6	Install sidewalks along Route 52 from the Town Hall to the Village of Fishkill, and from the Village of Fishkill to the former A&P Plaza	Pedestrian/Bicycle	LH	Fishkill Town/Village	Mid-Range	\$1,026,000	\$1,340,000	Yes	NYS DOT	No	C2
PB-7	Install a sidewalk along Route 9 from the Hyde Park Town Center (Calmer Pl) to St. Andrews Rd (6,500 feet)	Pedestrian/Bicycle	UH	Hyde Park	Mid-Range	\$1,755,000	\$2,290,000	Yes	NYS DOT	No	C2
PB-8	Complete the Harlem Valley Rail Trail from Millerton to Columbia County line	Pedestrian/Bicycle	HV	North East	Mid-Range	\$6,304,000	\$8,225,000	Yes	DCDPW	Yes	C2
PB-9	Use the CSX right-of-way to create a trail connection between the Dutchess Rail Trail at Morgan Lake and the Walkway Over the Hudson (0.7 miles)	Pedestrian/Bicycle	LH	Poughkeepsie City	Mid-Range	\$1,000,000	\$1,000,000	Yes	DCDPW	No	C2
PB-10	Install sidewalks on Route 9 from Mesier Ave north to IBM Rd and a pedestrian bridge on Route 9 over the Wappinger Creek	Pedestrian/Bicycle	LH	Poughkeepsie/Wappingers Falls	Mid-Range	\$3,850,000	\$5,020,000	Yes	NYS DOT	Yes	C2
PB-11	Install pedestrian right-of-way signs and crosswalks at high traffic pedestrian points along Routes 9 and 308	Pedestrian/Bicycle	UH	Rhinebeck Village	Mid-Range	\$1,000,000	\$1,300,000	Yes	NYS DOT	No	C2
PB-12	Repair and install sidewalks to Livingston Elementary School, Rhinebeck High School, Starr Library and Recreation Park, Northern Dutchess Hospital, and the Dutchess County Fairgrounds (6,000 feet)	Pedestrian/Bicycle	UH	Rhinebeck Village	Mid-Range	\$1,620,000	\$2,100,000	Yes	Rhinebeck Village	No	C2
PB-13	Install pedestrian right-of-way signs and crosswalks in the Tivoli business district	Pedestrian/Bicycle	UH	Tivoli Village	Mid-Range	\$50,000	\$65,000	Yes	Tivoli Village	No	C2
PB-14	Install sidewalks in Tivoli Acres, on Woods Rd, and on Broadway to Pine St (2,700 feet)	Pedestrian/Bicycle	UH	Tivoli Village	Mid-Range	\$729,000	\$951,000	Yes	Tivoli Village	No	C2
PB-15	Improve pedestrian crosswalks on Route 9 in Wappingers Falls at East Main St, Old Route 9, and between East Main St and Wenliss Terr (McDonalds/Planet Fitness)	Pedestrian/Bicycle	LH	Wappingers Falls	Mid-Range	\$164,000	\$214,000	Yes	NYS DOT	No	C2
PB-16	Improve pedestrian safety and calm traffic by narrowing the East Main St/South Ave (Route 9D)	Pedestrian/Bicycle	LH	Wappingers Falls	Mid-Range	\$500,000	\$653,000	Yes	NYS DOT	No	C2
PB-17	Install a sidewalk on one side of CR 93 (Myers Corners Rd/Middlebush Rd) from Route 9D to Route 376 (24,000 feet)	Pedestrian/Bicycle	LH	Wappinger	Long-Range	\$6,318,000	\$12,800,000	Yes	DCDPW	No	C2
PB-18	Repair or improve sidewalks at locations with heavy pedestrian activity (approx. 10 miles)	Pedestrian/Bicycle	ALL	Dutchess County	Long-Range	\$14,250,000	\$29,000,000	Yes	ALL	No	C2
PB-19	Install sidewalks and crosswalks on Pinewoods Rd and East Market St to connect Route 9 to Town parks and Route 9G (1,500 feet)	Pedestrian/Bicycle	UH	Hyde Park	Long-Range	\$131,000	\$131,000	Yes	Hyde Park	Yes	C2
PB-20	Evaluate Routes 44, 52, 55, and 82 as State bicycle routes and designate/sign if feasible	Pedestrian/Bicycle	LH,	Multiple	Long-Range	\$25,000	\$51,000	Yes	NYS DOT	No	A7
PB-21	Install high-visibility crosswalks at South Ave (Route 9D)/E. Main St, E. Main St/Remsen Ave, W. Main St (Route 9D)/Convent Ave, W. Main St (Route 9D)/West St, W. Main St (Route 9D)/School St, W. Main St (Route 9D)/Church St, and Route 9 at 9 Plaza	Pedestrian/Bicycle	LH	Wappingers Falls	Long-Range	\$600,000	\$1,220,000	Yes	NYS DOT	No	C2
PS-1	Conduct sidewalk inventories and develop sidewalk improvement strategies for cities, villages, and town centers (using the Village of Rhinebeck Sidewalk Study as a template) (\$50,000 per study)	Planning Study	ALL	Dutchess County	Short and Mid-Range	\$700,000	\$784,000	Yes	PDCTC	No	C3
PS-2	Complete a Corridor Management Plan for Route 9G (study area to be determined)	Planning Study	UH	Hyde Park, Rhinebeck, Red Hook	Short-Range	\$125,000	\$141,000	Yes	NYS DOT/PDCTC	No	C3
PS-3	Complete a Corridor Management Plan for Route 9D (study area to be determined)	Planning Study	LH	Multiple	Short-Range	\$125,000	\$141,000	Yes	NYS DOT/PDCTC	No	C3
PS-4	Complete a trails plan for the Town of Pine Plains and environs	Planning Study	UT	Pine Plains	Short-Range	\$50,000	\$56,000	Yes	PDCTC	No	C3
PS-5	Complete a Regional Transit Study for the TMA (Dutchess, Orange, and Ulster counties)	Planning Study	ALL	Dutchess County	Short-Range	\$500,000	\$563,000	Yes	PDCTC/OCTC/UCTC	No	C3
PS-6	Update the County's Bicycle and Pedestrian Plan, incorporating local sidewalk studies and addressing access to trails, ADA requirements, and bicycle routes	Planning Study	ALL	Dutchess County	Mid-Range	\$100,000	\$131,000	Yes	PDCTC	No	C3
PS-7	Study the feasibility of reintroducing on-street parking and slowing traffic speeds to 30 MPH on Route 9 in the Hyde Park Town center (from St Andrews Rd to Market St)	Planning Study	UH	Hyde Park	Mid-Range	\$25,000	\$33,000	Yes	NYS DOT	No	C3
PS-8	Determine the feasibility of using the CSX West Branch for Route 9 access to the proposed residential development at the former Dutton Lumber site	Planning Study	LH	Poughkeepsie City	Mid-Range	\$50,000	\$65,000	Yes	Poughkeepsie City	No	C3
PS-9	Conduct a planning study to look at ways to redesign Route 44/55 (eastbound and westbound arterials) into a pedestrian and bicycle-friendly facility, such as a boulevard	Planning Study	LH	Poughkeepsie City	Mid-Range	\$125,000	\$163,000	Yes	NYS DOT	No	C3

Table 8-1. Moving Dutchess: Recommended Projects (Non-bridge Maintenance) (2012-2040)

MTP ID#	Project Description/Recommendation <sup>1</sup>	Project Type	Area <sup>2</sup>	Location	Time Frame <sup>3</sup>	Est Cost (2011) <sup>4</sup>	Est Cost (YOE) <sup>5</sup>	Fed-Aid Eligible <sup>6</sup>	Project Sponsor	TIP Status <sup>7</sup>	Air Quality Code <sup>8</sup>
PS-10	Conduct a needs assessment/feasibility analysis for a connector road between Route 9 and 9G, in the area between Pinewoods Rd and St Andrews Rd	Planning Study	UH	Hyde Park	Mid-Range	\$75,000	\$153,000	Yes	NYSDOT/PDCTC	No	C3
SA-1	Install a warning device on Route 44 near DeLavernge Hill (0.6 miles south of Route 83) to alert drivers of sharp turns	Safety	HV	Amenia	Short-Range	\$25,000	\$28,000	Yes	NYSDOT	No	A7
SA-2	Improve sight distance at the Route 343/CR 2 (Leedsville Rd) intersection	Safety	HV	Amenia	Short-Range	\$25,000	\$28,000	Yes	NYSDOT	No	A5
SA-3	Improve sight distance at the CR 19 (Bulls Head Rd)/Lake Dr intersection	Safety	UT	Clinton	Short-Range	\$25,000	\$28,000	No	DCDPW	No	A5
SA-4	Install warning devices at Dutchess Rail Trail crossings on Route 376 and Lake Walton Rd	Safety	LT	East Fishkill	Short-Range	\$50,000	\$50,000	Yes	NYSDOT/DCDPW	No	A7
SA-5	Install a traffic signal at the entrance to the FDR Historic Site on Route 9 to improve safety and operations	Safety	UH	Hyde Park	Short-Range	\$50,000	\$56,000	Yes	NYSDOT	No	D2
SA-6	Conduct a safety assessment at the Route 44/CR 71 (West Rd) and Route 44/CR 72 (North Ave)	Safety	UT	Pleasant Valley	Short-Range	\$25,000	\$28,000	Yes	NYSDOT	No	C3
SA-7	Conduct a safety assessment at the CR 65 (Hunns Lake Rd)/CR 86 (Bangall-Amenia Rd) intersection in	Safety	UT	Stanford	Short-Range	\$25,000	\$28,000	Yes	DCDPW	No	C3
SA-8	Conduct safety assessments at high crash locations identified in <i>Moving Dutchess</i>	Safety	ALL	Dutchess County	Short-Range	\$200,000	\$225,000	Yes	PDCTC	No	C3
SA-9	Add left-turn lanes at the Route 55/CR 9 (Beekman Rd) intersection (eastbound and westbound)	Safety	LT	Beekman	Mid-Range	\$3,296,000	\$4,301,000	Yes	NYSDOT	Yes	A19
SA-10	Improve sight distance at the Route 376/Clove Branch Rd/Hillside Lake Rd intersection	Safety	LT	East Fishkill	Mid-Range	\$25,000	\$38,000	Yes	NYSDOT	No	A5
SA-11	Install traffic calming devices on Barton St from Church St and CR 62 (Rudd Pond Rd)	Safety	HV	Millerton Village	Mid-Range	\$25,000	\$38,000	No	Millerton Village	No	A7
SA-12	Reconstruct the Taconic State Parkway interchanges at Rossway Rd and Tyrrel Rd to improve safety	Safety	UT	Pleasant Valley	Mid-Range	\$34,100,000	\$44,000,000	Yes	NYSDOT	Yes	D3
SA-13	Reconstruct the Route 9/44/55 interchange to improve safety	Safety	LH	Poughkeepsie City	Mid-Range	\$58,550,000	\$76,400,000	Yes	NYSDOT	Yes	C3
SA-14	Install traffic calming devices in the Rhinecliff hamlet, especially along Kelly St and Orchard St	Safety	UH	Rhinebeck Town	Mid-Range	\$25,000	\$33,000	No	Rhinebeck Town	No	A7
SA-15	Improve horizontal alignment, sight distance, and safety on CR 28 (Old Hopewell Rd) from Route 9 to CR 94 (All Angels Hill Rd)	Safety	LH	Wappinger	Mid-Range	\$5,616,000	\$7,328,000	Yes	DCDPW	Yes	A6
TDM-1	Promote Travel Demand Management (ridesharing and vanpool services) throughout Dutchess County (511NYRideshare) and implement the Enhanced Commuter Choice program (\$225,000 annually) <sup>9</sup>	TDM	ALL	Dutchess County	Short, Mid, and Long-Range	\$6,525,000	\$6,525,000	Yes	NYSDOT	Yes	Non-Exempt
TR-1	Upgrade the existing transit hub on Market St in the City of Poughkeepsie to allow for off-street passenger boarding; includes new shelters. (No change in bus routing).	Transit	LH	Poughkeepsie City	Short-Range	\$2,379,000	\$2,379,000	Yes	Poughkeepsie City	Yes	B8
TR-2	Bus replacements for the City of Poughkeepsie bus system (2012-2015)	Transit	LH	Poughkeepsie City	Short-Range	\$565,000	\$656,000	Yes	Poughkeepsie City	Yes	B10
TR-3	Bus replacements for the Dutchess County LOOP bus system (2012-2015)	Transit	ALL	Dutchess County	Short-Range	\$3,195,000	\$3,596,000	Yes	Dutchess County	Yes	B10
TR-4	Operating assistance for the City of Poughkeepsie bus system (2012-2015)	Transit	LH	Poughkeepsie City	Short-Range	\$1,360,000	\$1,531,000	Yes	Poughkeepsie City	Partial	B1
TR-5	Operating assistance for the Dutchess County LOOP bus system (2012-2015)	Transit	ALL	Dutchess County	Short-Range	\$1,872,000	\$2,107,000	Yes	Dutchess County	Partial	B1
TR-6	Preventive maintenance activities for the City of Poughkeepsie bus system (2012-2015)	Transit	LH	Poughkeepsie City	Short-Range	\$1,080,000	\$1,216,000	Yes	Poughkeepsie City	Yes	B3
TR-7	Preventive maintenance activities for the Dutchess County LOOP bus system (2012-2015)	Transit	ALL	Dutchess County	Short-Range	\$5,300,000	\$5,965,000	Yes	Dutchess County	Yes	B3
TR-8	Operating assistance for the Newburgh-Beacon ferry service between the City of Newburgh and Beacon Train Station (\$938,000 annually)	Transit	LH	NYSDOT	Short-Range	\$3,750,000	\$3,750,000	Yes	NYSDOT	Yes	B1
TR-9	Poughkeepsie Train Station rehabilitation	Transit	LH	Poughkeepsie City	Short-Range	\$6,000,000	\$6,753,000	Yes	Metro-North Railroad	Yes	B8
TR-10	Beacon Train Station parking expansion	Transit	LH	Beacon	Short-Range	\$10,000,000	\$11,255,000	Yes	Metro-North Railroad	Yes	Non-Exempt
TR-11	Wassaic Metro-North Rail Yard Expansion	Transit	HV	Amenia	Short-Range	\$3,000,000	\$3,377,000	No	Metro-North Railroad	Yes	B1
TR-12	Wassaic Train Station parking expansion	Transit	HV	Amenia	Short-Range	\$1,625,000	\$1,829,000	Yes	Metro-North Railroad	Yes	Non-Exempt
TR-13	Expand marketing of bus transit services (Dutchess County LOOP and City of Poughkeepsie)	Transit	ALL	Dutchess County	Short-Range	\$100,000	\$113,000	Yes	Dutchess County/Poughkeepsie City	No	B1
TR-14	Poughkeepsie-White Plains Commuter Bus Service	Transit	LH	Multiple	Short-Range	\$6,000,000	\$6,000,000	Yes	NYSDOT	Yes	B1
TR-15	Bus replacements for the Dutchess County LOOP bus system (2016-2025)	Transit	ALL	Dutchess County	Mid-Range	\$6,585,000	\$8,592,000	Yes	Dutchess County	No	B10
TR-16	Bus replacements for the City of Poughkeepsie bus system (2016-2025)	Transit	LH	Poughkeepsie City	Mid-Range	\$3,955,000	\$5,160,000	Yes	Poughkeepsie City	No	B10
TR-17	Preventive maintenance activities for the Dutchess County LOOP bus system (2016-2025)	Transit	ALL	Dutchess County	Mid-Range	\$13,250,000	\$17,288,000	Yes	Dutchess County	No	B3
TR-18	Preventive maintenance activities for the City of Poughkeepsie bus system (2016-2025)	Transit	LH	Poughkeepsie City	Mid-Range	\$2,700,000	\$3,523,000	Yes	Poughkeepsie City	No	B3
TR-19	Operating assistance for the Dutchess County LOOP bus system (2016-2025)	Transit	ALL	Dutchess County	Mid-Range	\$4,680,000	\$6,106,000	Yes	Dutchess County	No	B1
TR-20	Operating assistance for the City of Poughkeepsie bus system (2016-2025)	Transit	LH	Poughkeepsie City	Mid-Range	\$3,400,000	\$4,436,000	Yes	Poughkeepsie City	No	B1
TR-21	Develop and implement a coordinated ITS architecture for the Dutchess County LOOP and City of Poughkeepsie bus systems	Transit	ALL	Service Area	Mid-Range	\$1,000,000	\$1,305,000	Yes	Dutchess County/Poughkeepsie City	No	B6
TR-22	Develop and implement a coordinated fare system for the Dutchess County LOOP and City of Poughkeepsie bus systems	Transit	ALL	Service Area	Mid-Range	\$200,000	\$261,000	Yes	Dutchess County/Poughkeepsie City	No	B6
TR-23	Install bus stop shelters at major bus stops (Dutchess County LOOP and City of Poughkeepsie)	Transit	ALL	Service Area	Mid-Range	\$100,000	\$131,000	Yes	Dutchess County/Poughkeepsie City	Yes	B7
TR-24	Expand demand responsive transit services throughout Dutchess County	Transit	ALL	Dutchess County	Mid-Range	\$3,520,000	\$4,593,000	Yes	Dutchess County	No	B1

Table 8-1. Moving Dutchess: Recommended Projects (Non-bridge Maintenance) (2012-2040)

MTP ID#	Project Description/Recommendation <sup>1</sup>	Project Type	Area <sup>2</sup>	Location	Time Frame <sup>3</sup>	Est Cost (2011) <sup>4</sup>	Est Cost (YOE) <sup>5</sup>	Fed-Aid Eligible <sup>6</sup>	Project Sponsor	TIP Status <sup>7</sup>	Air Quality Code <sup>8</sup>
TR-25	Bus replacements for the Dutchess County LOOP bus system (2026-2040)	Transit	ALL	Dutchess County	Long-Range	\$6,585,000	\$13,386,000	Yes	Dutchess County	No	B10
TR-26	Bus replacements for the City of Poughkeepsie bus system (2026-2040)	Transit	LH	Poughkeepsie City	Long-Range	\$3,955,000	\$8,040,000	Yes	Poughkeepsie City	No	B10
TR-27	Preventive maintenance activities for the Dutchess County LOOP bus system (2026-2040)	Transit	ALL	Dutchess County	Long-Range	\$18,550,000	\$37,710,000	Yes	Dutchess County	No	B3
TR-28	Preventive maintenance activities for the City of Poughkeepsie bus system (2026-2040)	Transit	LH	Poughkeepsie City	Long-Range	\$3,780,000	\$7,684,000	Yes	Poughkeepsie City	No	B3
TR-29	Operating assistance for the Dutchess County LOOP bus system (2026-2040)	Transit	ALL	Dutchess County	Long-Range	\$6,552,000	\$13,320,000	Yes	Dutchess County	No	B1
TR-30	Operating assistance for the City of Poughkeepsie bus system (2026-2040)	Transit	LH	Poughkeepsie City	Long-Range	\$4,760,000	\$9,676,000	Yes	Poughkeepsie City	No	B1

**Notes:**

- <sup>1</sup> Project recommendations and timeframes are subject to change based on future conditions. Road conditions do not reflect damage from Tropical Storm Irene (August 28-29, 2011).
- <sup>2</sup> LH: Lower Hudson; UH: Upper Hudson; LT: Lower Taconic; UT: Upper Taconic; HV: Harlem Valley.
- <sup>3</sup> Short-Range: 2012-2015; Mid-Range: 2016-2025; Long-Range: 2026-2040.
- <sup>4</sup> Total estimated planning-level cost in 2011 dollars.
- <sup>5</sup> Total estimated cost in Year of Expenditure (YOE) dollars: 2015 (Short-), 2020 (Mid-), or 2035 (Long-). YOE assumes 3% annual inflation.
- <sup>6</sup> Federal-aid eligibility refers to eligibility of project to receive federal funding.
- <sup>7</sup> TIP status refers to whether the project is programmed on the current 2011-2015 TIP.
- <sup>8</sup> See Appendix G for Air Quality Code definitions.
- <sup>9</sup> Estimated TDM cost for planning period is \$6,525,000, based on \$225,000 per year cost for 29 years.
- <sup>10</sup> Available highway/bridge funds include estimated annual federal, State, and local funds as follows:  
Short-Range: \$31 million average; Mid-Range: \$37 million average; Long-Range: \$53 million average.
- <sup>11</sup> Available transit funds include estimated federal, State, and local annual total of \$7.6 million.
- <sup>12</sup> Available planning funds include estimated federal, State, and local annual total of \$800,000.

<b>Federal-aid Eligible Sub-totals by Project Type</b>			
	<b>FFY 2011</b>	<b>YOE</b>	<b>Percent</b>
Bridge Maintenance	\$384,544,000	\$607,308,958	40.2%
Highway-Maintenance	\$239,727,000	\$400,374,000	26.5%
Highway-Operations	\$53,280,000	\$87,825,000	5.8%
Pedestrian-Bicycle	\$52,607,600	\$80,655,000	5.3%
Safety	\$101,987,000	\$132,510,000	8.8%
Transit	\$126,798,000	\$191,738,000	12.7%
Travel Demand Management	\$6,525,000	\$6,525,000	0.4%
Planning Studies	\$1,875,000	\$2,230,000	0.1%
	<b>\$967,343,600</b>	<b>\$1,509,165,958</b>	

<b>Total Federal-aid Recommendations</b>				
	<b>FFY 2011</b>	<b>YOE</b>	<b>Available<sup>10,11,12</sup></b>	<b>Balance</b>
Highway & Bridge (Construction only)	\$831,500,600	\$1,307,846,958	\$1,288,000,000	(\$19,846,958)
Transit	\$126,798,000	\$191,738,000	\$243,614,000	\$51,876,000
Planning/TDM/Other	\$9,045,000	\$9,581,000	\$23,842,000	\$14,261,000
	<b>\$967,343,600</b>	<b>\$1,509,165,958</b>	<b>\$1,555,456,000</b>	<b>\$46,290,042</b>

## Moving Dutchess

Table 8-2. Recommended Funding by Project Type

Federal-aid Eligible Project Type	FFY 2011	YOE <sup>1</sup>
Bridge Maintenance	\$384,544,000	\$607,308,958
Highway-Maintenance	\$239,727,000	\$400,374,000
Highway-Operations	\$53,280,000	\$87,825,000
Pedestrian-Bicycle	\$52,607,600	\$80,655,000
Safety	\$101,987,000	\$132,510,000
Transit	\$126,798,000	\$191,738,000
Travel Demand Management	\$6,525,000	\$6,525,000
Planning Studies	\$1,875,000	\$2,230,000
<b>Total</b>	<b>\$967,343,600</b>	<b>\$1,509,165,958</b>

<sup>1</sup> Year of Expenditure (YOE).

Table 8-3. Recommended Funding by Overall Project Type

Federal-aid Eligible Project Type	FFY 2011	YOE <sup>1</sup>
Highway & Bridge (Construction only)	\$831,500,600	\$1,307,846,958
Transit	\$126,798,000	\$191,738,000
Planning/Other	\$9,045,000	\$9,581,000
<b>Total</b>	<b>\$967,343,600</b>	<b>\$1,509,165,958</b>

<sup>1</sup> Year of Expenditure (YOE).

Table 8-4. Recommended Funding by Project Type and Time Period

Federal-aid Eligible Project Type	Short-Range (2012-2015)	Mid-Range (2016-2025)	Long-Range (2026-2040)	Total <sup>1</sup>
Bridge Maintenance	\$63,767,978	\$157,754,068	\$385,786,912	\$607,308,958
Highway-Maintenance	\$39,834,000	\$84,240,000	\$276,300,000	\$400,374,000
Highway-Operations	\$10,254,000	\$17,057,000	\$60,020,000	\$87,331,000
Pedestrian-Bicycle	\$9,981,000	\$27,472,000	\$43,151,000	\$80,604,000
Safety	\$162,000	\$132,067,000	\$0	\$132,229,000
Transit	\$50,527,000	\$51,395,000	\$89,816,000	\$191,738,000
Travel Demand Management	\$900,000	\$2,250,000	\$3,375,000	\$6,525,000
Planning Studies	\$2,231,000	\$723,000	\$102,000	\$3,056,000
<b>Total</b>	<b>\$177,656,978</b>	<b>\$472,958,068</b>	<b>\$858,550,912</b>	<b>\$1,509,165,958</b>

<sup>1</sup> Non-construction costs for Highway-Operations, Pedestrian/Bicycle, and Safety project types are included under Planning Studies (not shown in Table 8-2).

## Moving Dutchess

Table 8-5. Available Funding by Project Type and Source

		Short-Range (2012-2015)	Mid-Range (2016-2025)	Long-Range (2026-2040)	Total
<b>Highway-Bridge<sup>1</sup></b>	Federal	\$72,000,000	\$212,500,000	\$463,400,000	\$747,900,000
	State	\$48,000,000	\$141,700,000	\$308,900,000	\$498,600,000
	Local	\$4,000,000	\$11,800,000	\$25,700,000	\$41,500,000
	Subtotal	\$124,000,000	\$366,000,000	\$798,000,000	\$1,288,000,000
<b>Transit</b>	Federal	\$8,000,000	\$20,000,000	\$30,000,000	\$58,000,000
	State <sup>2</sup>	\$32,800,000	\$24,000,000	\$36,000,000	\$92,800,000
	Local <sup>3</sup>	\$12,800,000	\$32,000,000	\$48,000,000	\$92,800,000
	Subtotal	\$53,600,000	\$76,000,000	\$114,000,000	\$243,600,000
<b>Planning Studies<sup>4</sup></b>	Federal	\$2,560,000	\$6,400,000	\$9,600,000	\$18,560,000
	State	\$480,000	\$1,200,000	\$1,800,000	\$3,480,000
	Local	\$160,000	\$400,000	\$600,000	\$1,160,000
	Subtotal	\$3,200,000	\$8,000,000	\$12,000,000	\$23,200,000
<b>Total</b>	<b>\$180,800,000</b>	<b>\$450,000,000</b>	<b>\$924,000,000</b>	<b>\$1,554,800,000</b>	

<sup>1</sup> Available highway & bridge funds include funding for Highway-Operations, Pedestrian/Bicycle, and Safety projects (construction only).

<sup>2</sup> Includes \$23,200,000 in programmed funds for MTA/Metro-North projects during 2012-2015.

<sup>3</sup> Includes fare revenue, local match for federal funds, and general local funds.

<sup>4</sup> Does not include \$642,000 in PL savings backlog.

## Moving Dutchess

Table 8-6. Fiscal Constraint Analysis by Overall Project Type and Time Period

Federal-aid Eligible Sub-totals <sup>1</sup>	Short-Range (2012-2015)			Mid-Range (2016-2025)			Long-Range (2026-2040)		
	Recommended	Available	Balance	Recommended	Available	Balance	Recommended	Available	Balance
Highway & Bridge (Construction only)	\$124,000,000	\$124,000,000	\$0	\$418,600,000	\$366,000,000	-\$52,600,000	\$765,300,000	\$798,000,000	\$32,700,000
Transit	\$50,500,000	\$53,600,000	\$3,100,000	\$51,400,000	\$76,000,000	\$24,600,000	\$89,800,000	\$114,000,000	\$24,200,000
Planning Studies/Non-construction	\$3,100,000	\$3,200,000	\$100,000	\$3,000,000	\$8,000,000	\$5,000,000	\$3,500,000	\$12,000,000	\$8,500,000
Total	\$177,600,000	\$180,800,000	\$3,200,000	\$473,000,000	\$450,000,000	-\$23,000,000	\$858,600,000	\$924,000,000	\$65,400,000

<sup>1</sup> Funding amounts rounded to the nearest hundred-thousandths.

Table 8-7. Overall Fiscal Constraint Analysis

Federal-aid Eligible Sub-totals <sup>1</sup>	Overall Planning Period (2012-2040)		
	Recommended	Available	Balance
Highway & Bridge (Construction only)	\$1,307,900,000	\$1,288,000,000	-\$19,900,000
Transit Projects	\$191,700,000	\$243,600,000	\$51,900,000
Planning Studies/Non-construction	\$9,600,000	\$23,200,000	\$13,600,000
Total	\$1,509,200,000	\$1,554,800,000	\$45,600,000

<sup>1</sup> Funding amounts rounded to the nearest hundred-thousandths.