



MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

October 14, 2009

MCPB
Item # 9A
10/29/09

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Rollin Stanley, Director, Planning Department *RS*
Mary Bradford, Director, Parks Department *M*
Glenn Kreger, Acting Chief, Vision/Community Based Planning Division *GK*
Mark Pfefferle, Acting Chief, Green/Environmental Planning Division *MP*
John Carter, Chief – Design/Urban Design Division *JC*
Dan Hardy, Chief – Move/Transportation Planning Division *DKH*

FROM: Tom Autrey (301-495-4533), Supervisor, Move/Transportation Planning Division *TA*
Katherine Holt (301-495-4549), Planner Coordinator, Vision/Community Based Planning Division *KH*

SUBJECT: Purple Line Functional Plan – Public Hearing Draft

STAFF

RECOMMENDATION: Approve Plan As Public Hearing Draft Plan
Set Public Hearing Date of Thursday, December 10, 2009

Summary

Staff is requesting that the Planning Board approve the accompanying Draft Purple Line Functional Plan as the Public Hearing Draft Plan and set December 10, 2009 as the date for the public hearing.

Planning Department work on the development of the Purple Line Functional Plan began in May 2007 with the publication of the Draft Purpose and Outreach Report. Other schedule milestones include the following:

- October 30, 2007 – Master Plan Advisory Group Meets for First Time
- October 17, 2008 – Maryland Transit Administration Releases Alternatives Analysis/ Draft Environmental Impact Statement (AA/DEIS)
- January 15, 2009 – Planning Board Recommends Medium Investment Light Rail Alternative with modifications as Locally Preferred Alternative

- January 27, 2009 – County Council Recommends Medium Investment Light Rail Alternative with modifications as Locally Preferred Alternative
- August 4, 2009 – Governor O'Malley selects Medium Investment Light Rail Alternative with modifications as Locally Preferred Alternative

The Draft Plan that staff has prepared and is presenting for your consideration as the Public Hearing Draft Plan reflects the Locally Preferred Alternative recommended by both the Planning Board and County Council and selected by the Governor. This Draft Plan is an update of the Georgetown Branch Master Plan Amendment (January 1990) and as such, will amend other adopted plans that previously reflected a Purple Line from Bethesda to Silver Spring. This Public Hearing Draft Plan confirms the previously adopted alignment along the Georgetown Branch right of way with the adjoining Capital Crescent Trail and (unlike previously adopted plans) extends the Purple Line east of Silver Spring to the County Boundary on University Boulevard (MD 193) where the Purple Line enters Prince George's County.

Scope of Plan

As a Functional Plan, this plan addresses the physical elements (alignment and right of way requirements, station locations, and mode) of the Purple Line and where applicable, the adjoining Capital Crescent Trail. The plan does not address land uses along the alignment.

There are other elements of our current work program that do address land uses at specific Purple Line stations. These efforts include the Takoma Langley Crossroads Sector Plan and the Long Branch Sector Plan.

Master Plan Advisory Group (MPAG) Review

The MPAG has had an opportunity to review the Draft Plan narrative. Many but not all of the suggested changes proposed by members have been incorporated into the narrative. The MPAG met 19 times between October 2007 and the release of the Purple Line AA/DEIS in October 2008 and has met an additional seven times since October 2008. The input of the MPAG has been invaluable throughout the entire process – from the evaluation of the AA/DEIS through the development of a recommendation on a Locally Preferred Alternative. The staff would like to again publicly acknowledge the time and effort of the MPAG members over the past two years. A list of the members is attached to this memorandum. The participation of any single individual should not be viewed as necessarily supportive of the Draft Plan. The goal at the outset in the formation of the MPAG was to insure that there was representation from many different stakeholders. To that end, the membership exceeded 30 in number.

Maryland Transit Administration (MTA) Review

The MTA Project Team has reviewed the Draft Plan narrative and right of way width for consistency with the current project planning. The Draft Plan notes that the Purple Line project planning is on-going and subject to change as the project planning advances into preliminary engineering, final design, and construction.

Dale Drive Station

The Planning Board recommended to the County Council that the proposed station at Dale Drive be eliminated from further consideration. The County Council recommended that the MTA project planning provide for the ability to add the station at some later date if desired. The Locally Preferred Alternative as identified by the Governor refers to the status of the Dale Avenue station as “under study.” The Draft Functional Plan refers to the station as “not being included in initial construction phase; the timing of implementation to be determined.” Staff views this wording as consistent with the recommendation by County Council.

The MTA has conducted an analysis of the Locally Preferred Alternative as identified by the Governor O’Malley and found that the elimination of the Dale Drive station results in a ridership loss of about 1,600 boardings and an increase in the cost-effectiveness from \$22.12 per hour to \$23.27 per hour. The MTA is recommending that the County reconsider its position on not including the station in the Locally Preferred Alternative.

The MTA has issued an evaluation of the merits of the station and that evaluation is attached for reference. The evaluation essentially makes the point that the ridership for the Dale Drive station is in part due to the riders from the area south of Wayne Avenue – the high rise apartments on Thayer Avenue being an example.

The MTA analysis estimates that a Dale Drive station in 2030 would have double the boardings of the Fenton Street Station (i.e., 1,400 vs. 750). We believe that further model refinement is needed to account for differences in walk access between stations in close proximity. This level of precision was not needed to discriminate among the wide range of alternatives assessed in the AA/DEIS planning process, but is important for future preliminary engineering and design efforts. MTA acknowledges that this effort will be a focus of subsequent model refinement for more detailed planning.

The community remains divided on this issue. Many residents believe the community would ultimately benefit from a station. Many other residents believe the location of a station at Dale Drive would present problems with school access and/or could potentially lead to higher densities in the immediate area. Staff continues to support work program elements that advance Purple Line Station Area planning so that a comprehensive vision of where change is expected – and where change is not expected – begins to take shape along those locations along the corridor where there is a need for additional or updated planning guidance.

Staff recommends that the Planning Board retain the language in the Draft Plan with respect to the Dale Drive station. Staff also recommends that the MTA continue to examine the issue in subsequent model runs with an emphasis on refining how the model accounts for walk access to station in close proximity of one another.

Land Use Forecasts

The Council of Governments is currently engaged in the Round 8 cooperative forecasting process. The Round 8 estimates (expected to be completed during summer 2010) will extend the planning horizon year to 2040 and offer the Planning Board an opportunity to review in some detail the planned growth (i.e., land use forecasts) along our three primary transit lines – the Metrorail Red Line, the Corridor Cities Transitway, and the Purple Line. In the case of the Purple Line, continued coordination with the cooperative forecasts within Prince George's County is needed as well. Continued proactive transit supportive land use planning and forecasts reflecting those efforts remain key elements of the evaluation of New Starts project planning from the perspective of the Federal Transit Administration.

Schedule

The anticipated schedule for the review and eventual adoption of the Purple Line Functional Plan is presented below:

October 29, 2009 – Approval of Public Hearing Draft Plan and Public Hearing Date
December 10, 2009 – Public Hearing On Purple Line Functional Plan
January 14, 2010 – Planning Board Worksession On Functional Plan
February 4, 2010 – Planning Board Forwards Planning Board Draft Plan to County Council
February & March 2010 – County Executive Fiscal Review of Plan
April 2010 – County Council Hearing Notice Period
May 2010 to June 2010 – Council Review and Adoption of Plan

MPAG Members

Phil Alperson, Pat Baptiste, Veda Charrow, Joe Cholka, Michele Cornwell, Karen FitzGerald, Gigi Godwin, Peter Gray, Tony Hausner, Byrne Kelly, Sue Knapp, Caleb Kriesberg, Michael Marsh, Anne Martin, Bill Mellema, Andy O'Hare, Ted Power, Chris Richardson, Joe Rodriguez, Karen Roper, Rob Rosenberg, David Saltzman, Harry Sanders, Fred Schultz, Todd Solomon, Judy Tso, and Mier Wolf

Alternates

Pam Browning, Heather Dlhopsky, Allison Driver, Lisa Fadden, Issac Hantman, Kent Holland, Ginnane Italiano, Webb Smedley, and David Smith



An Evaluation of the Merits of an LRT Station at Dale Drive and Wayne Avenue

August 2009



An Evaluation of the Merits of an LRT Station at Dale Drive and Wayne Avenue

The Dale Drive station on Wayne Avenue in Silver Spring has been the subject of much discussion. Some members of the local community have been opposed to the station; generally because of fears that the area would be rezoned to permit denser development. The Montgomery County Planning Board recommended dropping the station, or at least deferring its construction. The County Council concurred with this, but recommended that the Purple Line be designed and built so that the station could be added sometime in the future without having to acquire additional land.

The recently announced Locally Preferred Alternative includes a surface alignment on Wayne Avenue, but identifies the timing of the construction of the Dale Drive station as “under study”. There are two issues that support the immediate inclusion of the Dale Drive station: access for local users (and how many local users there would be), and the effect of the station on the project’s cost-effectiveness rating under the FTA’s C/E measure. A careful review of the alignment and the projected ridership supports the inclusion of the Dale Drive station. The continued refinement of the travel forecasting model has emphasized the importance of the Dale Drive station. New ridership projections should be available in the near future.

Ridership and Access for Silver Spring Residents

Some community members had questioned the number of riders anticipated at this station. A closer examination of the travel demand forecasts shows that the majority of the projected riders would come from the Travel Analysis Zone to the south of Wayne Avenue. **Figure 1** shows the population in the Travel Analysis Zones in the year 2030.

Figure 1: 2030 Population by TAZ



This area is more densely developed than the neighborhood to the north with multifamily housing and some high-rise apartment buildings on Thayer Avenue.

Figure 2 shows the large number of trip productions in the zone south of Wayne. The purpose of the Purple Line is to provide access and mobility to residents, employees, and other travelers in the corridor.

Figure 2: 2030 Population Trip Productions and Attractions by Zone using Dale Drive Station

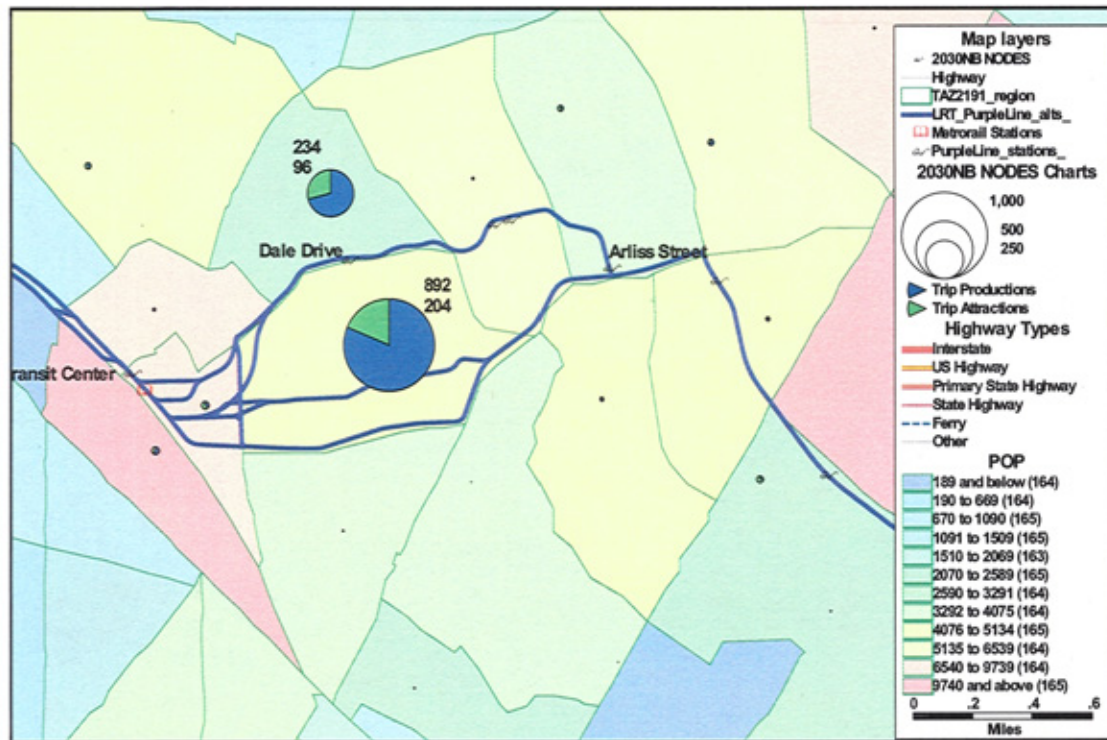
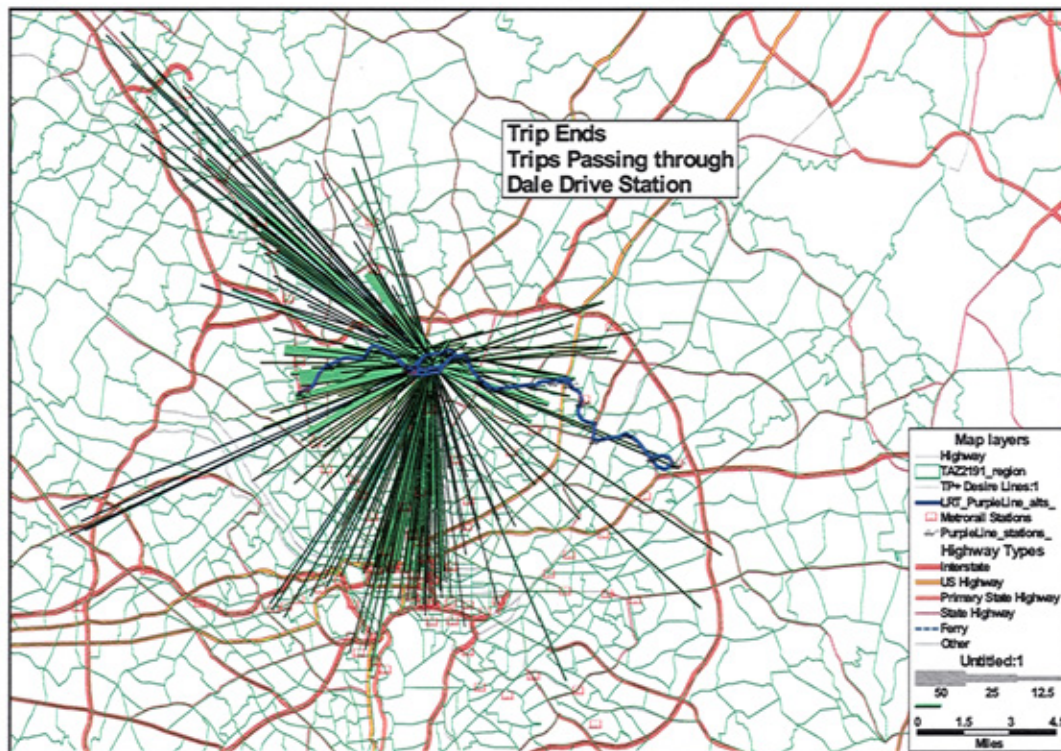


Figure 3 shows the number of transit trips boarding or alighting at Dale Drive in a 24-hour period and shows where those riders would be going to and coming from. The straight lines are a relative indication of where the Dale Drive trips are going to or coming from. The thicker lines that go to and from zones near Bethesda suggest that a large share of the riders to and from Dale Drive are going to and from Bethesda. While there are some locations that are important destinations for trips to and from Dale Drive, there are destinations and origins all over the region that are served by the station.

Figure 3: Destinations and Origins of Riders Using the Dale Drive Station



Without the Dale Drive station the distance between the station at the Fenton Street (the new Silver Spring Library) and at Manchester Place would be one mile apart. (See **Figure 4**). This would leave a large segment unserved by the Purple Line. The general rule of thumb is that Americans will walk $\frac{1}{4}$ -mile to a transit station. The figure below shows $\frac{1}{4}$ -mile radius circles around Fenton Street (the new Silver Spring Library), Dale Drive, and Manchester stations.

The physical geography of an area also has a major impact on station accessibility. The steep hills of this area and the presence of Sligo Creek shape the roads and constrain access to the stations.

Figure 4 clearly shows that dropping the station at Dale Drive would leave a segment of $\frac{1}{2}$ -mile without convenient access to the Purple Line. This particularly affects the many residents who live south of Wayne Avenue.

Figure 4: Quarter-Mile Buffers around Wayne Avenue Stations



Cost-Effectiveness

Dropping the station would decrease the Purple Line travel time by approximately 20 seconds. Albeit small, any decrease in travel times is generally seen as a benefit, but the benefit in this case would be to those who are outside these neighborhoods rather than those in this part of Silver Spring. However, for many Silver Spring residents, their total travel time would actually increase because of their longer walk times to the remaining stations. Because the FTA's cost-effectiveness measure looks at total trip time this affects the cost effectiveness figure. The inclusion of the Dale Drive station improves the FTA-defined cost-effectiveness of the Purple Line considerably, by almost \$1. (See **Table 1**). The MTA's latest numbers from the model indicate that the LPA would have a cost-effectiveness of \$23.27 per hour (2009 \$) without benefit of the Dale Avenue boardings of 1,427 on an average weekday in 2030 and \$22.12 per hour with the benefit of those boardings. The FTA cost-effectiveness threshold for FY 2011 is \$24.99 per hour. This significant improvement which would strongly improve the project in the national competition for federal funding.

It should be noted that with the Dale Drive station, boardings and alightings at Manchester Road only decrease by about 25, while they decrease at the Silver Spring Library by about 140. This is probably a reflection of the geographic constraints mentioned earlier.

Table 1: Ridership and Cost-Effectiveness with and without Dale Drive Station

	LPA without Dale Drive	LPA with Dale Drive	Change with Dale Drive
Daily Boardings			
Silver Spring Transit Center	12,371	12,756	+3%
Silver Spring Library (Fenton Street)	883	743	-16%
Dale Drive	0	1,427	n/a
Manchester Road	943	918	-3%
Total for East Silver Spring Stations	14,197	15,844	+12%
Total Daily Line Boardings	63,004	64,836	+3%
TSUB (daily minutes)	15,231	16,027	+5%
Cost/Effectiveness (\$/Hour)	\$23.27	\$22.12	-5%

Summary

The construction of the Dale Drive Station is strongly supported by both the purpose of the project (serving local communities and providing them access to the transit service), and the substantial improvement to the project's cost-effectiveness. Given this, the MTA urges Montgomery County to support the inclusion of the Dale Drive station in the initial construction of the Purple Line.