Introduction

This document outlines a framework for a pilot Career and Technical Education (CTE) Program specifically, though not exclusively, targeting youth involved in the County's Child Welfare or Probation system. The framework will help Metro and its partners build the education and training pipelines necessary to prepare students for careers in transportation. Modeled after the Alliance for Quality Career Pathways (AQCP)¹, the framework includes:

- 1. Definitions and a conceptual model for the Metro Career Pathways (MCP);
- 2. Criteria and quality indicators for MCP; and
- 3. A set of interim and outcome metrics for measuring and managing MCP student progress and success.

The AQCP framework is jointly gathered and developed by the US Departments of Education, Labor, and Transportation. The career pathway approach is increasingly gaining momentum; the State of California, along with others, have adopted it.² Public and private funders have supported the career pathway approach through numerous initiatives that include financial investments, technical assistance, regulatory guidance, and evaluations. Foundation-funded supportive efforts include the Ford Foundation's *Bridges to Opportunity*, the Joyce Foundation's *Shifting Gears*, and the multi-funder *Breaking Through* and *Accelerating Opportunity* initiatives.³

Metro has chosen to model the AQCP framework because it is flexible and can be customized or tailored to the needs of a specific sector, like transportation. The career pathway approach is especially beneficial for more vulnerable populations, whose educational and career success is more often impeded by disconnects between systems and limited access to integrated services. The MCP seeks to establish career pathways for youth, with an emphasis on at-risk populations.

The career pathway approach ensures a system that provides clear transitions, strong supports, and other elements critical to the success of students. It is not simply a new model, rather, MCP is a paradigm shift in how Metro prepares youth for work and lifelong learning. It reorients existing education and workforce services from a myriad of disconnected programs to a structure that focuses on the workforce needs of Metro and on individuals in need of education and training to be successful on their career paths.

¹ AQCP is an initiative driven by the Center for Law and Social Policy (CLASP). CLASP is a national, nonpartisan, anti-poverty nonprofit advancing policy solutions for low-income people. www.clasp.org

² The states of Arkansas, California, Illinois, Kentucky, Massachusetts, Minnesota, Oregon, Virginia, Washington, and Wisconsin have partnered with CLASP on the development of the AQCP. www.clasp.org

³ www.clasp.org

Purpose & Need

Attracting, developing and retaining a diverse workforce is critical to the continuing success of Metro. Currently, Metro has 521 different job titles. Metro needs to build career pathways for all of them. The question facing Metro is: How best do we prepare the next generation for a career pathway into the transportation industry because we have to both *rebuild the existing* infrastructure and *plan for the expansion* of the system funded by Measure M?

Metro Workforce Challenges

Workforce challenges facing the transportation industry include looming retirements caused by

an aging workforce (39% of the Metro workforce will be fully eligible for retirement over the next three years); the need to retain workers who could leave for other industries (69% of Metro employees are over the age of 40); and the need to expand the workforce to meet the growing demand for transit (Measure M is estimated to generate an additional 778,000 jobs)⁴. Consistent with the national trend in the transit industry, Metro is experiencing a significant skills gap in the demand for and supply of high skilled workers⁵. (see Table 1 below). A bold and innovative non-traditional partnership is warranted. One solution is an

" No industry touches more lives than transportation." – Phillip A. Washington

increase in Career and Technical Education programs of study. Such programs begin in middle or high school and continue into postsecondary education or apprenticeship and provide the foundational and early occupational skills training needed in skilled occupations.

Table 1. Metro Top 10 "Hard to Fill" Skilled Jobs		Donec in mi
Bus Mechanic	Engineer, Software/Systems	
Rail Car Mechanic	Engineer, Construction	
Rail Signal Maintainer/Inspector	Safety Inspectors	
Track Maintainer	Electronic Comm Technician	
Traction Power Maintainer/Inspector	Facility Systems Technician	

A New Middle Class

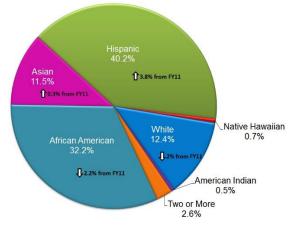
Despite these many challenges, transit has a number of strengths that can be sold to potential employees. First, many of the jobs in the transit industry have low barriers to entry. Second, many transit jobs pay well, with good benefits. In May of last year, the Pew Research Center issued a report update on "America's Shrinking Middle Class" as it pertains to US cities. The Los

⁴ Los Angeles Economic Development Corporation (LAEDC), 2016

⁵ American Public Transportation Association, 2015

Angeles region made a strong showing. "In about a quarter of the metropolitan areas in 2014, middle-class adults do not constitute a clear majority of the adult population," the Pew report states. "Notably, many of the nation's largest metropolitan areas fall into this group, including Los Angeles-Long Beach-Anaheim, CA, where 47% of adults were middle income." The LAEDC estimates that Metro's union-labor projects will employ more than 190,000 construction workers to build the Measure M capital projects over the next 40 years.

Third, transit has a better record of attracting a diverse workforce, compared to other transportation sectors. Lastly, transit provides long-term employment opportunities (51% of Metro employees have more than 10 years of service).



"Careers in the transportation industry can lift Americans into the middle class..." – US Secretary of Transportation Anthony Foxx

Collaboration with At-Risk Youth

Over the last 20 years, Metro has administered a summer high-school internship program, the Transportation Career Academy Program. However, in order to further foster a pipeline of qualified, local individuals for careers in the transportation sector, engaging youth early on, potentially as part of their middle or high school experience, provides an opportunity for Metro to address a gap in its current workforce development programs. Moreover, to collaborate with at-risk youth involved with LA County Children and Family Services (DCFS), the Department of Social Services, and the County Probation Department would serve to expose and connect youth to transit-related educational and career opportunities.

According to Metro Board Motion #43 (April 2017) by Directors Ridley-Thomas, Fasana, Barger, Garcetti, and Dupont-Walker:

DCFS serves nearly 35,000 children and their families across the County. High school graduation rates for this population are abysmal, with only 45% of foster youth in California completing high school, compared with 79% of the general student population. Nationally, only 6% of former foster youth have earned a two or four-year

degree by age 24, and only one in two foster youth is employed by age 24. Even more alarming, one in five foster youth becomes homeless after aging out of the system.

Additionally, the County's Probation Department supervises approximately 6,000 youth in the community and detains or incarcerates approximately another 1,100 on a daily basis. National statistics indicate that most youth in the juvenile justice system have had unstable educational histories with a high number of school transitions and disciplinary actions (i.e. suspensions). Researchers have found that over 40% may be enrolled in special education classes, approximately 50% perform below grade level, and as low as only 20 to 40% of justice-involved youth ultimately earn a diploma or General Equivalency Degree.

The MCP incorporates a youth engagement and outreach program designed to educate and attract youth and young adults, from junior high and high school, to transit. In addition, the MCP is designed to address the education needs of the at-risk youth population that could result in identifying a preparatory school for the vocational and educational program. Furthermore, Career Pathways systems that are aligned with Registered Apprenticeship programs can expand the number of people who can access these high-demand jobs.⁶ As a result, MCP would be aligned with the local labor unions.

Through the efforts of the MCP, Metro seeks to improve the attractiveness of the agency as an "employer of choice" through innovative policy and practice such as an industry-based CTE, personalized learning, and STEM. Metro will seek a pilot program/site that agrees to implement all of these core Metro components.

The Framework

MCP can provide a more holistic, functional approach to teachers, policymakers and students to reconsider the way in which transportation education is delivered. It allows students to have ownership over their own learning in rigorous and engaging environments that utilize relevant and transportation specific demonstrations of learning.

The framework includes three parts:

a) Definitions and a conceptual model provide a more precise understanding of the career pathway systems. MCP partners can use these definitions and conceptual model to develop a shared understanding of the systems, pathways, and programs they are collaborating to build.

⁶ "Strengthening Skills Training & Career Pathways" Report by US Department of Transportation, US Department of Labor, & US Department of Education, 8/24/15

- b) Criteria and indicators for MCP. These criteria and indicators can help partners build a strong, functioning MCP. Additionally, a shared framework of quality criteria and specific indicators can help partners develop a continuous improvement process for successful cross-agency systems, pathways and programs.
- c) The pathways and programs will be designed to support student apprenticeships, mentorship and internships while they earn wages and advance to job placements and careers in the workforce after high school graduation. A unique feature of the AQCP metrics is that they are meant to measure the results of specific career pathways that cross systems. As such, they are designed primarily for continuous improvement purposes and are best positioned at this time to be used in "pilot-testing with specific career pathways and programs".

Essential features of the MCP include:

- 1. **Connected and transparent education**, training, credentialing, and support service offerings (delivered via multiple linked and aligned programs with the appropriate Departments of the County of Los Angeles including:
 - Office of Education
 - Department of Workforce Development
 - Children and Family Services Department
 - Department of Public Social Services
 - Department of Aging
 - Department of Community Services
 - Probation Department
- 2. **Multiple entry points** that enable well-prepared students as well as targeted populations with limited education to successfully enter the career pathway. Targeted populations served by MCP may include youth involved in the Child Welfare System, County Probation system, homeless, and disconnected or "opportunity" youth.
- 3. **Multiple exit points** at successively higher levels leading to self- or family-supporting employment and aligned with subsequent entry points.

All three features above of the MCP correspond to transportation career and technical education programs of study. Essential functions of the MCP include:

- 1. Student-focused education and training;
- Consistent and non-duplicative assessments of students' education, skills, and assets/needs;
- 3. Support services and career navigation assistance to facilitate transitions; and
- 4. Employment services and work experiences.

The MCP is customized to Metro's needs, the target population needs, and the local partners and context. The MCP approach is a paradigm shift in how Metro prepares people for work and lifelong learning. It reorients existing education and workforce services from myriad disconnected programs to a structure that focuses on the workforce needs of Metro and on

individuals in need of education and training to be successful on their career paths. This approach focuses on systems change to provide clear transitions, strong supports, and other elements critical to success of students. The MCP approach includes an explicit focus on reducing racial and ethnic disparities in education and employment while at the same time increasing diversity in employers' talent pipelines.

Criteria

MCP partners could include, but are not limited to: public agencies, secondary education, career and technical education, workforce, health and human services, justice, corrections, economic development, transportation, workforce investment boards, labor unions, philanthropic organizations; and others.

The MCP framework criteria include:

- 1. **Commit to a Shared Vision & Strategy:** Metro in conjunction with County partners are committed to a shared vision of transportation-based career pathways for youth and to a strategy for building, scaling, and dynamically sustaining a MCP system.
- 2. Integrate Transportation Sector Principles: Metro will follow transportation sector strategy principles including being demand-driven.
- 3. **Collaborate to Make Resources Available:** Each MCP partner identifies, prioritizes, and leverages resources available for the MCP system.
- 4. **Implement Supportive Local/Regional Policies:** MCP partners implement supportive policies for the MCP system.
- 5. Use Data & Shared Measures: MCP partners use data to assess, demonstrate, and improve MCP student outcomes.
- Implement & Integrate Evidence-Based Practices & Processes: MCP partners implement practices and processes to provide the essential features and functions in MCP. Partners measure success and engage in a continuous improvement process in order to develop and integrate evidence-based practices and processes that optimize MCP student success.

Metro and labor unions fulfill an essential role in the MCP partnership by providing real access to the job market and they:

- Inform and validate career pathway alignment of skills, credentials, and employment;
- Recruit students from within their organizations and the larger community.
- Provide training services and/or access to continued learning;
- Provide leadership on continuous improvement processes;
- Champion career pathway efforts with stakeholders;
- Provide employment opportunities.

Metro will partner with job-driven training programs that integrate hands-on work experience with classroom learning to help individuals learn and advance more quickly. Metro engagement includes providing direct resources for on-the job training, mentoring, apprenticeships, and internships for those wishing to improve their skills.

Working with the MCP partners, the pilot vocational training and education site should address the following:

- MCP provides consistent and non-duplicative assessment of students' support service assets and needs.
- MCP provides **academic advising and supports** that keep students engaged as they move along the career pathway.
- MCP provides career navigation assistance.
- MCP provides **personal skill development and supports** for students assessed to need them.
- MCP provides employment services for students.
- MCP provides work experiences for students.

Indicators

The MCP framework indicators include:

- MCP partners should adopt a shared strategy and formally commit their organizations to carrying out specific roles and responsibilities and to communicating and coordinating with each other to build, scale, and dynamically sustain the MCP and embed them into their own strategic plans/goals and into new and existing policies.
- MCP partners engage in visible and consistent messaging to show support for and promote the MCP approach and system.
- MCP partners link to and leverage other existing related Metro initiatives (i.e. Transportation Careers Academy Program, Workforce Initiative Now-LA, Bus Operator Training Academy, Project Labor Agreement-Construction Careers Program).

- MCP partners communicate lessons learned from MCP to state and federal partners in order to inform state and federal strategies and investments.
- MCP partners leverage and coordinate existing and new federal, state, local, and private/philanthropic resources to support the MCP.
- MCP partners adopt a joint funding strategy to build, scale, and sustain the MCP.
- MCP partners produce cross-agency data and publish reports on MCP students' progress and success in earning credentials and achieving labor market outcomes using a consistent set of shared measures. Results are presented in terms of progress and success along the MCP, not by program/funding silos. Information is provided to MCP partners, policymakers, and students/potential students.

Performance Metrics

The AQCP metrics include three types of measures:

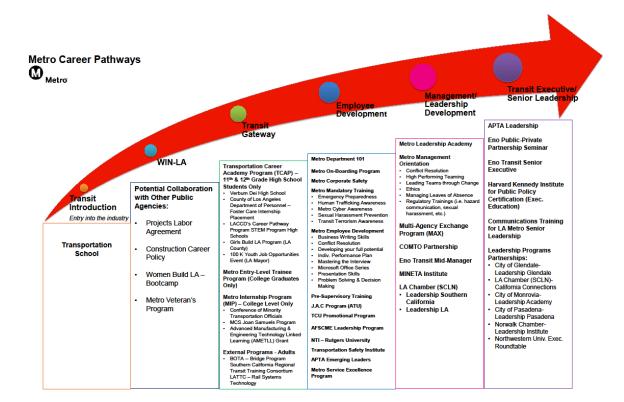
- a. Interim Outcomes identify important progress steps, or "momentum points", along the MCP that may be attained by the students prior to the overall results for the pathway;
- Education and Training Outcomes along the MCP include the primary educational and training results for the career pathway, including licenses and industry credentials, certificates, and degrees; and
- c. Labor Market Outcomes include the primary labor market results for the career pathway, to measure the progression in employment and earnings over time for pathway students.

Metro has chosen the AQCP metrics for the MCP because the AQCP metrics are focused on results. Existing measurement systems – with different goals, measures, and timeframes – make it difficult to connect education and employment services in a seamless way to help students reach their educational and career goals. MCP metrics are intended to follow career pathway students across organizational and institutional boundaries as they move along the pathway, and thereby allow the measurement of results for individual career pathways, using the applicable pathway metrics.

Career Pathway

The Career and Technical Education (CTE) innovative pathway at MCP is a customized interdisciplinary educational curriculum designed for students to become critical thinkers as they transition into the high skilled workforce. MCP offers an interactive curriculum which is aligned with the AQCP metrics, in addition to giving the students a real world hands-on experience, combined with both workforce skills development and college and career pathways, that will meet the demands of Metro top 10 "Hard-To-Fill Skilled Jobs." This process gives each student an opportunity to learn skilled trades, that will prepare them for employment and beyond. Additionally, MCP CTE cluster of courses also encourages students to explore and prepare for careers in Pre-Engineering, STEM, Construction, Carpentry, Welding, Plumbing, Electrical and HVAC. MCP secondary students (6th to 8th grade) will take part in all pre-requisite skill sets courses, and our post-secondary students (9th to 12th grade) will advance and transition into their skill trade coursework of study. The quality core of MCP innovative pathway will be instructionally and academically supported by and adhere to:

- All content areas of study include a defined sequence of coursework and competencies across middle school and high school education, that incorporates both academic, and technical knowledge and employability skills
- The MCP curriculum starts with broad foundational knowledge and skills and progress in specificity to build students' depth of knowledge and skills
- MCP CTE content areas of study sequence is designed to lead to one or more recognized postsecondary credentials, including industry certification, licenses, apprenticeship certifications, and post-secondary transition into a degree program
- The MCP CTE pathway program will align with the requirements of all county and state mandates
- The MCP CTE pathway program will provide state-of the-art classrooms with equipment and technology in a hands-on learning environment
- The program will incorporate assessments tools to measure the effectiveness of career pathways, established benchmarks and achievements
- The program will incorporate mentorships, internships, and apprenticeships
- All graduates of MCP CTE pathway will receive a High School Diploma, with state industry certifications to enter the workforce as well as credentials to transition into college
- The MCP CTE pathway program will provide teachers with on-going quality professional development
- The MCP CTE pathway program will incorporate residential housing to mitigate barriers in the career pathways arising from homelessness for all students



Next Steps

Metro will work with the County Departments to develop a Program Charter. Metro will also retain a consultant to perform the next phase of establishment of an MCP – identification of a pilot CTE training program tailored to transportation, the related site, and coordination with the relevant local department of education and state department of education.