Metro

METRO TRANSPORTATION SCHOOL

FINAL FEASIBILITY REPORT

How to Expose, Educate, and Employ the Next Generation into the Transportation Industry

PREPARED BY CAUSEIMPACTS

JUNE 2018

cause IMPACTS


“TELL ME
AND I FORGET.
TEACH ME
AND I REMEMBER.
INVOLVE ME
AND I LEARN.
– BENJAMIN FRANKLIN
cause IMPACTS

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LETTER FROM THE CEO

August 14, 2018

Dear Stakeholders:

We are excited to share "The Metro Transportation School Final Feasibility Report." As many of you know, Metro and Los Angeles County officials recently celebrated the kick-off of the Transportation School at the facility's future site in South Los Angeles.

The Transportation School can't be built quickly enough. More than 3,000 workers at Metro are currently eligible for retirement and that number could rise to 46 percent of our workforce in the next five years. At the same time, Measure M is expected to generate 778,000 jobs across the region in the next 40 years as we build the nation's largest public infrastructure program. The only way this work will be completed is if Metro actively gets involved in exposing, educating and employing our future workforce.

Los Angeles County is also a place where too many young adults aren't working and nearly one-third of our teen workforce is under-employed. With the Transportation School, Metro has the opportunity to address our needs and, equally important, give back to the community by educating youth and providing them with the kind of good paying and quality jobs that sustain families and communities.

On a personal note, I am honored and humbled to take part in this effort. I often talk about leaving an infrastructure inheritance for our children and I see the Transportation School as an essential part of that effort — and one that will touch the lives of kids who desperately need the support, direction and love that we can provide. Please take the time to read this report carefully and, as always, we welcome your feedback on this essential initiative.

Sincerely,

Phillip A. Washington
Chief Executive Officer

EXECUTIVE SUMMARY

This summary synthesizes the key findings and analyses performed by causeIMPACTS from December 2017 through June 2018 regarding the feasibility of Los Angeles County Metropolitan Authority (Metro) to develop and implement a countywide educational and career-training program. A roadmap to support Metro's implementation of the program and school development is included and a timeline for implementation can be found in Section nine of the report.

Project Need

Transportation Industry associations, workforce development specialists, researchers, and educators have all shown that the pool of qualified job seekers is not keeping pace with the Transportation Industry's workforce needs. According to the Bureau of Labor Statistics the transit industry is expected to create nearly one million jobs over the next several years. However, transit employers across the country are continually struggling to find candidates with the requisite credentials and experience.

Los Angeles County is experiencing unprecedented job growth in the Transportation Industry. The Los Angeles Economic Development Corporation (LAEDC) projects that the recent passage of Measure M will generate 778,000 new jobs in the next 40 years. Looming retirements are further compounding the need to attract, develop, and retain a highly skilled and diverse transportation workforce. At the Los Angeles County Metropolitan Transportation Authority (Metro), more than 28% of the current work force, over 3,000 employees, is eligible for retirement. And that percentage is expected to increase to 46% within the next five years.

While transportation employers struggle with these pressing workforce needs, young people in LA County—especially Young Opportunity Youth—are struggling to graduate from high school and secure stable, upwardly mobile jobs. Throughout this report, Young Opportunity Youth refers to youth ages 12-18 who are currently receiving services from, or are at risk of entering, the County's child welfare system, probation department/juvenile justice system, or homeless services.

Vision and Mission

As an innovative public transportation agency, Metro developed the Metro Career Pathways Program in order to create a learning environment through which Metro can attract, develop, retain, and motivate a world-class workforce. The continuum of programs is designed to strengthen management and leadership skills of existing employees and to prepare tomorrow's transportation leaders. Recognizing the value of cultivating the pipeline of qualified workers at a younger age and the tremendous need for high quality education and gainful employment for the region's Young Opportunity Youth population, Metro issued a Request for Proposals (RFP) and contracted consulting firm causeIMPACTS to conduct a feasibility study on a pilot educational and vocational training program that would facilitate local youth's access to career pathways in LA County's Transportation Industry. The feasibility study included an assessment of developing a Transportation School.

Misson
Prepare Los Angeles County youth for career and college pathways in the global Transportation Industry by teaching them transferrable STEAM (Science, Technology, Engineering, Arts, and Math) industry skills.

While transportation employers struggle with these pressing workforce needs, young people in LA County—especially Young Opportunity Youth—are struggling to graduate from high school and secure stable, upwardly mobile jobs. Throughout this report, Young Opportunity Youth refers to youth ages 12-18 who are currently receiving services from, or are at risk of entering, the County's child welfare system, probation department/juvenile justice system, or homeless services.

Metro's Role

Metro's role in the Transportation School is to serve as an extremely engaged founding industry partner and collaborate with the School Operator that will lead the day-to-day operations and management of the school. Additionally, Metro will provide real world learning opportunities for students, curriculum supports, mentorships, hands-on learning opportunities, teacher professional development, and other programming that helps to expose, educate, and employ youth in the Transportation Industry.

The E3 Initiative

One of the key findings from the initial best practices research is that the general public is unaware about transportation careers and the wide-ranging opportunities that exist throughout the industry. In order to address this challenge, causeIMPACTS recommends a broader, longer-term strategy—The E3 Initiative. This initiative would offer exposure activities to as many young people as possible, educational programming to a smaller pool of students, and targeted employment support and job training for young people who are interested in entering the global Transportation Industry workforce.

The centerpiece of the E3 Initiative is a Metro Transportation School that prepares Los Angeles County students for STEAM careers, with a specialized focus on the transportation and infrastructure industries. In order to maximize its potential impact on LA County youth, Metro also plans to offer a range of supplemental E3 programs that support student learning about the global Transportation Industry countywide. These programs will complement the school by providing students direct exposure, education, and real-world work experience. Metro will begin by expanding the existing field trip program to include industry field trips and tours, exploring how to expand the Transportation Career Academy Program (TCAP), developing an Introduction to the Transportation Industry workshop that can be provided to schools across the County including probation camps, and exploring how to develop a non-traditional youth apprenticeship program. This supplemental E3 programming expands Metro's ability to expose more youth to the Transportation Industry and engage younger students who are not old enough to attend the school.

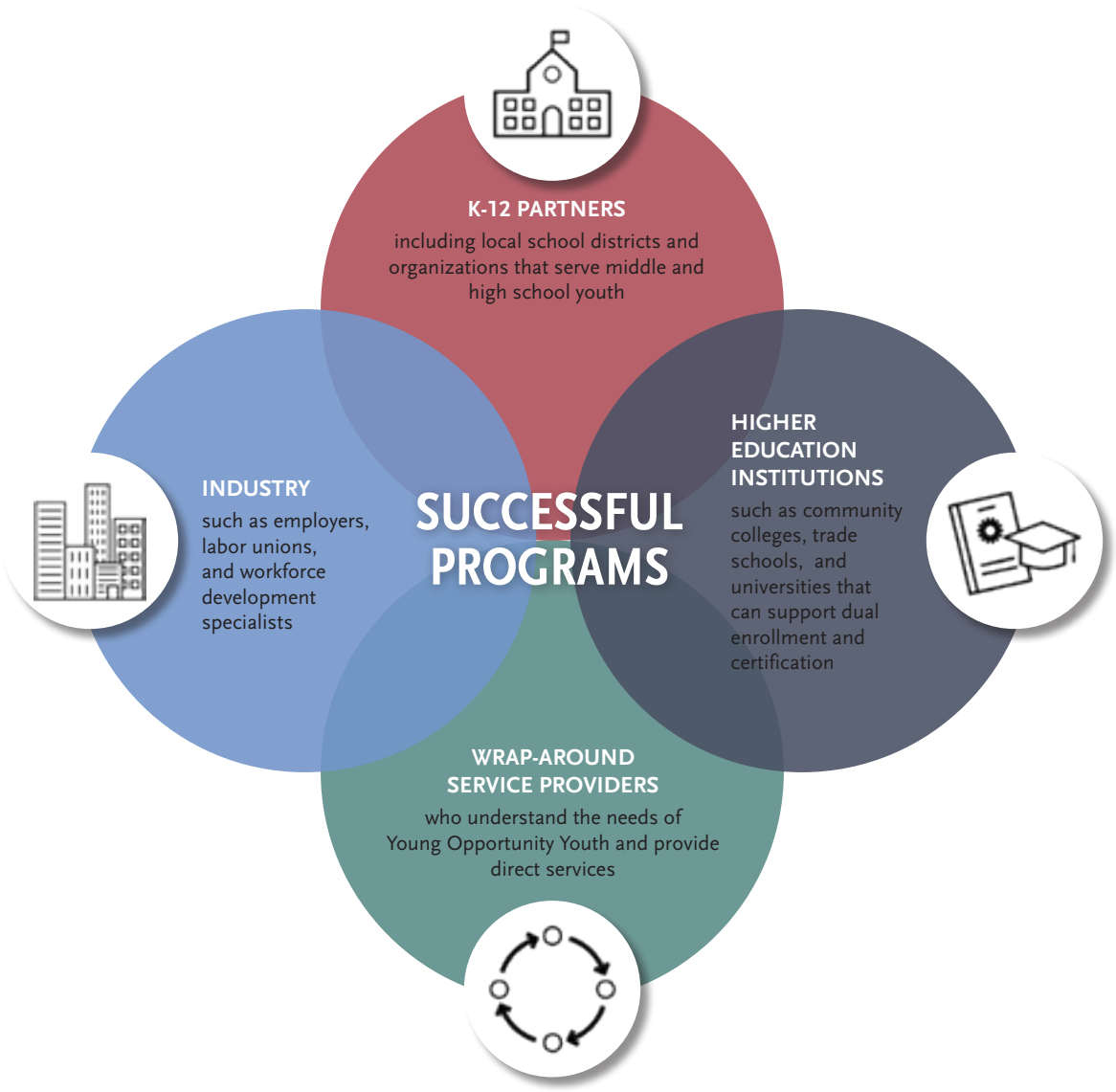
Opening the Transportation School will take approximately two years; as Metro works with the School Operator to open the Transportation School, the E3 team can begin to develop and launch these E3 programs. Furthermore, Metro should work on a pilot project with the Los Angeles County Probation Department in order to become familiar with the unique supports that Young Opportunity Youth need and to build competency with serving this population before the Transportation School opens

E3 Initiative Goals:

Essential Partners

Successful industry-aligned educational initiatives for youth engage a cross-sector group of stakeholders including K-12 partners, higher education institutions, and Industry Partners. The Transportation School seeks to serve a diverse group of students including Young Opportunity Youth, and therefore must also include wrap-around service providers. In April 2018 Metro convened an External Stakeholders Working Group in order to attain input on the direction of the E3 Initiative and the Transportation School. Metro also organized an Internal Working Group in order to gather the feedback and insights of Metro employees.

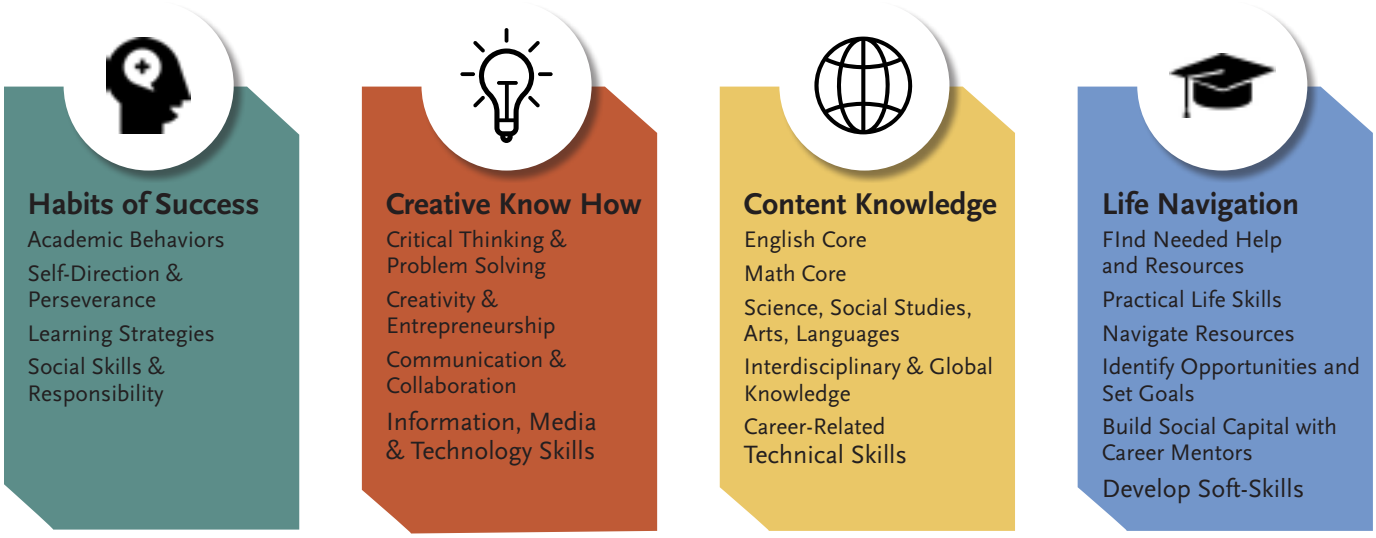
Key Stakeholders for this Project



School Philosophy

The philosophy of the Transportation School is to provide students with the skills needed to survive and thrive in school and life. A list of Signature Practices that Metro believes the Transportation School should adopt in order to provide a Transportation Industry-aligned education is found in Section 4 of this report.

Provide Students with the Skills Needed to Survive and Thrive in School and Life



Key School Design Recommendations

Legal Structure- Countywide Benefit Charter
Countywide Benefit Charters serve a student population that cannot be served as well by a charter school that operates in only one school district in the County.

Wall-to-Wall School Career Pathways
A Transportation School that is truly connected to the transportation and infrastructure industries and provides relevant career education and skills should have "wall-to-wall" career academies. This means that the school has multiple career pathways (typically 3-4) that students can choose and follow throughout their time at the school and that every student is in one of the pathways. Potential pathways for the Transportation School include: Engineering, Construction and Trades, Mechanics and Operations, Global Trade and Logistics, Business Operations, Civics and Public Policy, and Safety.

Selecting a School Model-Boarding School Model
The vision for a Transportation Industry-aligned school that provides holistic education, wall-to-wall career pathways, and wrap-around services in order to address any barriers to education can best be accomplished through a Boarding School Model. The boarding school model would include a high-quality college preparatory educational program as well a 24-hour residential component that provides access to essential services and supports and would be the first of its kind in LA County.

Benefits of Boarding School Model:

- ✔ **Industry Alignment:** The boarding school model provides more time during the day to provide Industry learning, and the innovative nature of the model will likely attract partners.
- ✔ **Innovativeness:** The urban public boarding school is a relatively new model in Los Angeles. Metro will be a leader in the field.
- ✔ **Impact:** The residential aspect of this model increases positive impact as youth are provided free housing and wrap-around services that address barriers to educational success.
- ✔ **School Culture:** The immersive nature of the boarding school model promotes a strong sense of community among students and staff.
- ✔ **Ease of Start-Up:** Boarding Schools have multiple additional regulatory requirements and certifications that are not required for traditional schools.
- ✔ **Recruiting and Retaining Students:** Recruiting and enrolling new students is difficult for any new school. Partnerships with County agencies and the ability to recruit students from across the County can improve enrollment.
- ✔ **Scalability:** Not easily scalable due to the high cost and space requirements of boarding. Even so, the housing needs in LA County may increase demand and therefore drive growth.
- ✔ **Sustainability:** The cost is 2-3 times higher per student than a nonresidential school. Creative funding streams must be identified in order to make this model sustainable

Key School Design Recommendations

- 9TH-12TH grade- High school
- Coed
- Reserve at least 30% of seats for Young Opportunity
- Reserve 20% of seats for youth from the local community

Site Assessment for Boarding School in South Los Angeles

Typically, the most significant hurdle when building a new school is securing a site. LA County has overcome this hurdle by setting aside space for a Transportation Boarding School on a newly acquired site in South Los Angeles. Los Angeles County exercised its eminent domain authority to acquire a 4.2-acre property at the intersection of Vermont Avenue and Manchester Boulevard in South Los Angeles. Plans for the site include a mixed-use transit-oriented development that will include a transit plaza, affordable housing, a vocational training center, and other community-serving amenities such as a grocery store and small coffee shop.

CauseIMPACTS conducted an initial site assessment to determine the site's suitability to house the Transportation School. Some key findings are included below and additional findings are included in Section 11 of this report.

Strengths of the Site

- High concentration of Young Opportunity Youth surrounding the site.
- Multiple direct service providers that have experience serving Young Opportunity Youth immediately surrounding the site, including health services, legal aid, employment services, GYRD Gang Reduction services, and community and youth services.

Challenges of the Site

- There is notable enrollment competition and school saturation near the Vermont-Manchester site.

Funding the Transportation School

Boarding schools are expensive to operate in the state of California because traditional school funding does not cover boarding costs. Due to this, after expected revenue is accounted for, there will still be a funding gap of approximately $7 million dollars annually. The Transportation Boarding School will cost approximately $35,000-$40,000 per pupil annually to operate. A detailed school budget is included in Appendix C.

Metro will need to identify which line items of the school budget will be adopted as one-time vs. ongoing vs. excluded fiscal support for the Transportation School. In addition to adopted school-specific costs, Metro will incur additional internal costs due to contributed staff time spent volunteering, mentoring, and conducting real-world learning, as well as in-kind donations, branded materials, and staff time to collaborate with the school and implement other E3 Programming. In addition to financial support committed to the Transportation School, Metro will independently fund and implement E3 supplemental programs.

- 430 justice-system involved youth in the 3 zip codes immediately surrounding the site
- 1,691 foster youth in Group Homes in the 8 zip codes surrounding the site
- 3.82% of students in area schools are homeless and 1.94% are foster youth, compared to County averages of 3.6% and 0.83%
- Teen motherhood is 2 times more likely in South LA than all other County areas
- 11% of the homeless population in South LA are youth under 18

	125 Students	225 Students	325 Students	400 Students	400 Students
	Y1	**Y2**	**Y3**	**Y4**	**Y5**
TOTAL EXPENSES	5,473,700	8,243,550	11,386,552	13,341,632	13,569,039
TOTAL REVENUES	2,024,100	3,287,600	4,931,400	6,515,350	6,515,350
FUNDING GAP	3,068,575	4,574,925	6,074,127	6,826,282	7,052,689
PER PUPIL ANNUAL	43,789	36,638	35,035	33,354	33,920

Funding Strategies

1. Create a new fiscal entity through which Metro can fundraise for E3
2. Establish a joint fundraising committee that includes the school operator, Metro, LA County agencies, and other committed Industry partners
3. Meet with potential funders to have high-level conversations about the project vision and funding
4. Explore policy solutions that can allocate funding from existing government revenue streams and workforce development funds

Next Steps

Given the general public's lack of knowledge about the opportunities available in the global Transportation Industry, one of Metro's first actions should be to educate the public about the Industry and the depth and breadth of its well-paying, upwardly mobile careers. A few other activities to prioritize over the next year include:

1. Identify funding to cover the annual funding gap
2. Develop supplemental E3 programs (such as fieldtrips & school workshop)
3. Formalize partnership with school operator and other relevant partners
4. Develop a marketing campaign to teach young people about the Global Transportation Industry

Boarding School TImeline

E3 Supplemental Programming Timeline

2018

JULY
School Operator Onboarding
Develop Joint Vision with School Operator & Execute MOU

AUGUST
Create Fund Development strategy
Begin Writing Countrywide Benefit Charter Petition

SEPTEMBER - DECEMBER
Community Stakeholder Meetings
Meet with Prospective Donors and Prepare Grant Applications
Solidfy Career Pathways and Partners

JULY
Gather input from Internal Metro Working Group
Re-Design Field Trips Program

AUGUST
Launch Updated Field Trips Program Pilot
Research Registered Youth Apprenticeship Certification Process

SEPTEMBER - DECEMBER
Implement & Evaluate Field Trips Program Pilot
Develop Partnership with LAUSD, LA County Probation Dept. & LACOE to offer Intro to Transportation-Workshops
Continue Registered Youth Apprenticeship Research

2019

JANUARY
School Construction Begins

MARCH
LACOE Authorization of Countrywide Benefit Charter

APRIL - SEPTEMBER
Secure Industry Partners
Develop Industry Partners

SEPTEMBER - DECEMBER
Hire School Leader
Launch Student Recruitment Efforts
Pathways, Curriculum and Articulation Working Groups

JANUARY - FEBRUARY
Update & Enhance Field Trips Program

MARCH - JULY
Curriculum Development for School Workshops
Curriculum Development for Juvenile Camps & Halls Programming "

AUGUST - DECEMBER
Implement Juvenile Camps & Halls Program Pilots
Begin Youth Apprenticeship Certification Process

2020

JANUARY - JUNE
Expand Fundraising Efforts – Create Sponsorship Booklet
Hire School Staff

JUNE - AUGUST
Teachers & School Staff Professional Development

AUGUST
Ribbon Cutting Celebration with Families

SEPTEMBER
School Opens

JANUARY - JUNE
Evaluate Intro to Transportation Workshops and Juvenile Camps & Halls Programs
Update & Enhance Evaluated Programs"
Complete Youth Apprenticeship Certification Process

JUNE - AUGUST
Integrate E3 Programming into Transportation School's Teachers & School Staff PD

AUGUST
Integrate E3 Programming into Transportation School's Teachers & School Staff PD

SECTION 1: PROJECT VISION, MISSION, AND GOALS

About this Report:

This report synthesizes the key findings and analyses performed by causeIMPACTS from December 2017 through June 2018 regarding the feasibility of Los Angeles County Metropolitan Transportation Authority (Metro) to develop and implement a countywide educational and career-training program for Young Opportunity Youth. This report also provides a roadmap to support Metro's implementation of the program and school development.

The vision for this project came from Metro CEO Phillip Washington, who sought to develop educational programs that expose youth to the Transportation Industry, educate youth about transferrable industry skills, and ultimately employ youth into upward mobility industry jobs. In order to implement this, the "E3 Initiative- to Expose, Educate, and Employ the Next Generation" was developed.

Mission:

Prepare Los Angeles County youth for career and college pathways in the global Transportation Industry by teaching them transferrable STEAM[1] industry skills.

E3 Initiative Goals:

- Expose LA County youth to careers in the Transportation Industry
- Educate and train LA County youth in transferrable Transportation Industry-skills
- Expand Metro's highly skilled and diverse workforce to meet growing demands and retirements
- Reinforce Metro's role as an innovative public agency
- Support youth's transition into college and careers in the global Transportation Industry
- Develop pilot educational programs, including a Metro Transportation Boarding School

Commitment to serve Young Opportunity Youth

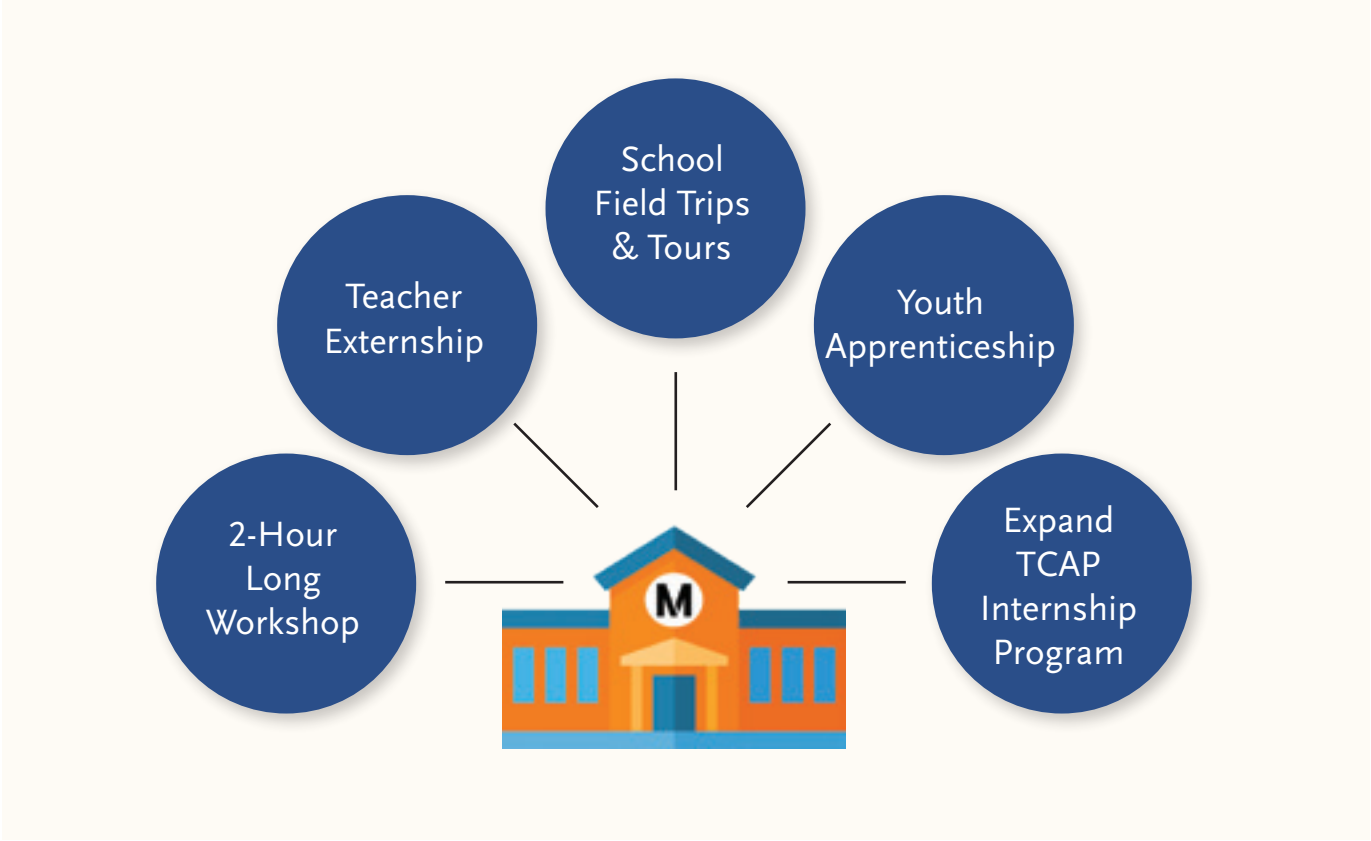
The E3 Initiative seeks to serve LA County youth with a commitment to ensure programming is accessible for Young Opportunity Youth ages 12-18. This includes youth who are currently receiving services from, or are at risk of entering, the County's child welfare system, probation department/juvenile justice system, or homeless services programs.

[1] *https://steamedu.com*

Metro Transportation School and Supplemental E3 Programming:

The centerpiece of the E3 Initiative is a Metro Transportation School that prepares Los Angeles County students for STEAM (Science, Technology, Engineering, Arts, and Math) careers, with a specialized focus on the transportation and infrastructure industries.

In order to maximize its potential impact on LA County youth, Metro also plans to offer a range of supplemental E3 programs that support student learning about the global Transportation Industry countywide. These programs will complement the school by providing students direct exposure, education, and real-world work experience with Metro. Furthermore, E3 programming expands Metro's ability to expose more youth to the Transportation Industry and engage younger students who are not old enough to attend the school.



These supplemental E3 programs will be developed over the Summer/Fall of 2018 and may include:

- Expanded fieldtrip and tours program;
- Introduction to the Transportation Industry workshop that can be provided at schools across the County;
- Expansion of the TCAP internship program so more youth can participate in paid internships at Metro;
- Development of a Metro employee mentorship program that engages employees and exposes youth to the Industry;
- Creation of youth apprenticeships that provide paid real world experience in the Industry and connect to other registered apprenticeship programs upon high school graduation.

SECTION 2: BUSINESS CASE/WHY IS METRO DOING THIS

The Transportation School has the potential to dramatically accelerate the upward mobility of youth while also addressing the workforce needs of the Transportation Industry.

Across the country, major investments in transportation have increased the demand for a skilled workforce. However, employers are struggling to find qualified, credentialed candidates. Job seekers often do not have the right credentials and new technologies in the industry require new skill sets. Additionally, competition from other high-tech industries is drawing away potential job applicants. Further compounding these challenges, over 50% of the national Transportation Industry workforce will be eligible for retirement in the next 10 years – a pace double that of the nation's entire workforce.

Job opportunities in the Transportation Industry are increasing

MEASURE M WILL GENERATE MORE THAN

778,000

New jobs in the next 40 years

Attracting, developing, and retaining a highly skilled and diverse workforce is critical to the continued success of the Transportation Industry.[2]

[2] *South East Transportation Workforce Center (SETWC) of the University of Memphis; Economic Forecast and Industry Outlook: 2018-2019. (2018). Los Angeles Economic Development Corporation.*

But the pool of qualified applicants IS NOT.

50%

Over 50% of the Transportation Industry workforce will be eligible for retirement in the next 10 years — a pace double that of the nation's entire workforce

Metro's Workforce Needs

The workforce challenges at Metro are similar to the nationwide trends. At Metro, more than 28% of the current work force, over 3,000 employees, is eligible for retirement and 46% may be eligible for retirement within the next five years. Metro must hire and train a younger workforce now to prepare for the jobs that these looming retirements will create.[3]

2,200 Number of **new employees** Metro hires annually

69% Metro employees who are currently **over 40 years old**

46% Metro employees who will be eligible for retirement in the **next 5 years**

Metro must expand its highly skilled and diverse workforce to meet growing workforce demands, skills-gaps, and looming retirements.

The passage of Measure M further increased the demand for a trained and credentialed workforce in the transportation infrastructure and building trades. Measure M is projected to generate 778,000 new jobs in the region over the next 40 years.[4] This number includes jobs at Metro as well as multiple jobs with Metro's contractors.[5] Unless new talent is trained, employers will continue to struggle to identify and hire skilled workers, and projects funded through Measure M will suffer.

[3] *"Measure M: The Los Angeles County Traffic Improvement Plan." (2016, August). LA County Metro.*

[4] *"Adopted Measure M Guidelines." (2017) LA County Metro. http://theplan.metro.net/wp-content/uploads/2017/07/guidelines_measurem_2017-0714.pdf*

[5] *"Measure M: The Los Angeles County Traffic Improvement Plan." (2016, August). LA County Metro. a*

Young Opportunity Youth's Needs

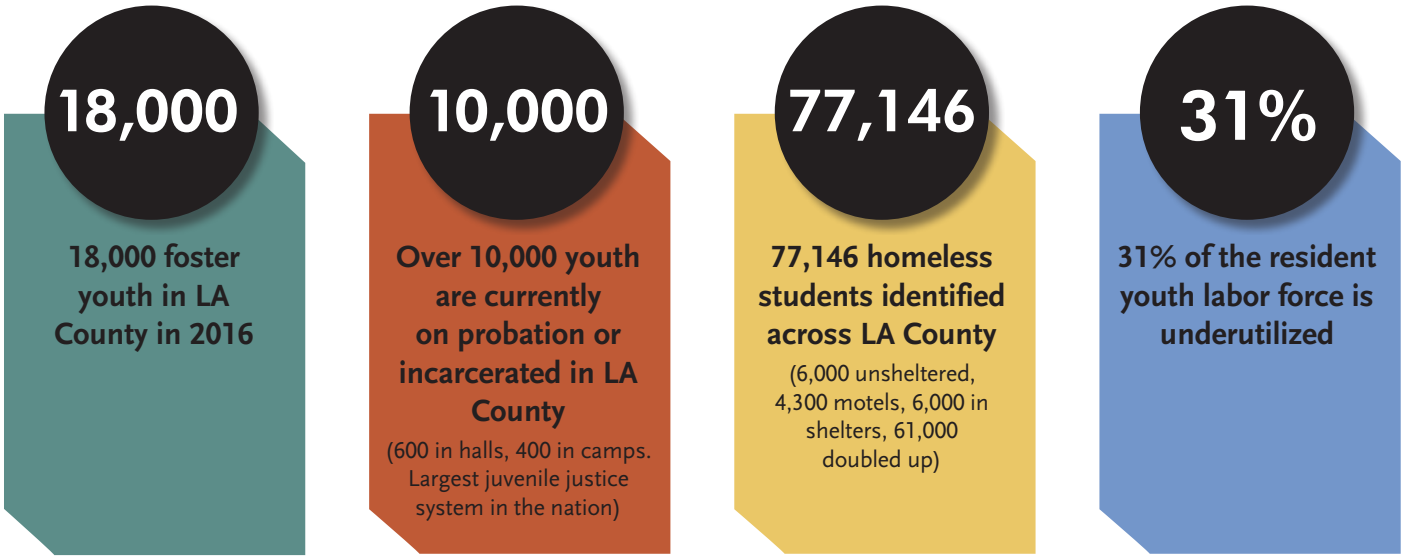
The E3 Initiative is a symbiotic opportunity for both Metro and Los Angeles County's Young Opportunity Youth population. A school that directly connects young people to Industry training and careers is greatly needed in Los Angeles County, where 1 in 6 youth ages 18-24 are disconnected from school or work and 31% of the youth resident labor force is underutilized.[6]

In the County of Los Angeles, 18,000 young people are in the foster care system, 77,146 students are homeless (6,000 unsheltered, 6,000 in shelters, 4,300 in motels, and 61,000 doubled up with other families), and 10,000 youth are currently on probation or incarcerated (600 in halls, 400 in camps).[7] This large number of Opportunity Youth would greatly benefit from high quality and trauma-informed education, housing, mentoring, nutrition, recreational opportunities, and/or supportive services. Addressing these needs would have measurable impacts on their well-being, motivation, and self-sufficiently, as well as improve the quality and quantity of career prospects that they may otherwise not have been able to access.

Young Opportunity Youth:

Young Opportunity Youth are youth age 12-18 who are currently receiving services from, or at risk of entering, the County's child welfare system, probation department/juvenile justice system, or homeless services.

Young Opportunity Youth in LA County



These **Young Opportunity Youth struggle to graduate and find employment**. During the 2015-16 school year, 79% of public school students in LA graduated from high school while in California, only 51% of Foster Youth graduated from high school on time.[8] Nationally, less than 20 % of homeless youth graduate from high school and only 40% of formerly incarcerated youth graduate from high school.[9]

[6] *Fogg, N., Harrington, P. (2016, July). "The Human Capital Investment Gap Understanding the Diminished Prospects of Disconnected Youth in Los Angeles." Drexel University Center for Labor Markets and Policy.*

[7] *LAHSA. (2017). Greater Los Angeles Homeless Count Results. Los Angeles Homeless Services Authority.*

[8] *KidsData.org. "Children in Foster Care." High School Graduates*

[9] *Ingram, E.S., Bridgeland, J.M., Reed, B., & Atwell, M. (2016). Hidden in plain sight: Homeless students in America's public schools. Civic Enterprises and Hart Research Associates.*

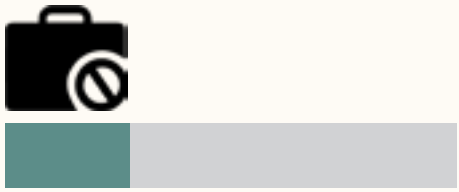
LA County Youth Need Jobs and Upward Mobility

The youth unemployment rate (ages 16-19) in the Los Angeles Metropolitan area is 27.5%, one of the highest in the country. One in six young people ages 18-24 are neither working nor in school in Los Angeles County.[10,11] Furthermore, young adults who are not in school or working cost taxpayers $93 billion annually and $1.6 trillion over their lifetimes in lost revenues and increased social services.[12]

Low Employment Rates

1 in 6

1 in 6 youth age 18-24 in LA County are neither working or in school (Disconnected)



27.5%

Los Angeles Metropolitan area has one of the highest youth unemployment rates in the US (unemployment rate for youth age 16-19 in 2016)

Strategic Opportunity for Metro

Metro is a national leader in creating career pathways for its employees. Metro's Human Capital and Talent Department manages over thirty different programs for job seekers and current employees that provide continuing training in order to up-skill employees and support their career advancement in the organization. Currently, high school students can enter Metro's employment pipeline through the Transportation Career Academy Program (TCAP), an 8-week summer internship at Metro headquarters. College students can participant in Metro's Internship Program (MIP) and apply to the Entry-Level Training Program (ELTP) upon graduation. The newly developed Workforce Initiative Now (WIN-LA) is a multi-agency partnership created to connect under-represented groups such as women, veterans, and under-employed individuals with job opportunities at Metro.[13] The E3 Initiative adds another rung to Metro's career pathways continuum by creating opportunities for middle and high school-age youth to learn about the variety of professions connected to the Transportation Industry.

While the E3 Initiative will target a younger demographic, it is not a departure from Metro's current efforts to attract, employ, and retain a qualified workforce. The increasing demand for a skilled transportation workforce—combined with Young Opportunity Youth's employment needs and Metro's workforce development expertise—create a strategic opportunity for Metro.

[10] *Fogg, N., Harrington, P. (2016, July). The Human Capital Investment Gap Understanding the Diminished Prospects of Disconnected Youth in Los Angeles. Drexel University Center of Labor Markets and Policy.*

[11] *Brookings Institute. (2016). Employment and disconnection among teens and young adults: The role of place, race, and education.*

[12] *Measure of America. (2017). A Portrait of Los Angeles County. Statistic--Opportunity Nation. Webpage. "Youth Disconnection" Accessed Jan 2018.*

[13] *WIN LA Workforce Initiative Now Los Angeles, FAQ sheet, Webpage. Accessed Jan 2018.*

Strategic Opportunity for Metro

Transportation Industry workforce needs and skills gaps

+

Students need 21st Century skills to be competitive in new job markets
(especially Young Opportunity Youth)

+

Metro already has some educational programs for youth but does not have many programs for middle and high-school aged youth

+

Metro has the muscle to champion and develop an innovative education-Industry Partnership
(Metro is the largest transit agency in CA)

Metro has the opportunity to address multiple agency needs and give back to the community by educating, and ultimately employing local youth.

Metro's Current Career Pathways

LA Metro 2017. Metro Career Pathways Report

WHAT can be done to expand Metro's existing workforce development programs to include more middle and high-school-age youth?

Transportation Careers Academy Program (TCAP)
Summer Internships for 11th and 12th graders

Workforce Initiative Now (WIN-LA)
Attract, develop, and employ underrepresented communities

Metro Internship Program (MIP)
College and graduate students

Entry Level Training Program (ELTP
Trains college graduates

SECTION 3: BEST PRACTICES IN INDUSTRY-ALIGNED CAREER EDUCATION

The E3 Initiative seeks to provide LA County youth with education and exposure to careers in the Global Transportation Industry . To inform the development of this initiative and the feasibility of developing a transportation-aligned school, an extensive review of current approaches was conducted. Special attention was paid to model programs and best practices in transportation and infrastructure-related career technical education and to programs serving Young Opportunity Youth.

This best practices research revealed that transportation schools are not a new concept. There are multiple model programs across the country that are educating and graduating high school youth with relevant Industry credentials, work experience, and an upward career trajectory.[14]

One of the key findings from the research, however, is that there is a complete lack of awareness about transportation careers and the wide-ranging opportunities that exist throughout the Industry. Furthermore, roundtable discussions with teachers and students revealed that very few young people understand the full breadth of the career opportunities available within the Transportation Industry.

When asked what kinds of jobs they believe are available in the Transportation Industry, students said:

- "Drive a bus"
- "Conduct a train"
- "Metro police"
- "Clean the tracks"
- "Make the tracks"
- "Pave the streets"
- "Be a train operator and give drivers directions "

The Transportation Industry is so vast that the general public does not understand it or the array of opportunities therein. Subsequently, there are many misperceptions about the types of jobs available in the Transportation Industry that may prevent job seekers—especially young job seekers—from applying for employment at Metro or in the broader Global Transportation Industry. To mitigate these public perception issues, one of Metro's first actions should be to educate the public about the global Transportation Industry, as well as the depth and breadth of its well-paying, upward-mobility careers.

Benefits of Career Education:

- ✔ Creates an engaging learning community
- ✔ Increases student engagement by connecting academics to the real world
- ✔ Enhances academic achievement
- ✔ Amplifies skills, specifically in STEAM: Science, Technology, Engineering, Art, and Math
- ✔ Increases graduation rates and retention of high-risk students
- ✔ Increases percentage of college-going students post high school graduation
- ✔ Increases employment rates and average wages

[14] *Plank, Stephen B., Stefanie DeLuca, and Angela Estacion. "High school dropout and the role of career and technical education: A survival analysis of surviving high school." Sociology of Education 81, no. 4 (2008): 345-370., https://www.cde.ca.gov/ci/ct/gi/cteschoolleaderfacts.asp*

What is the Global Transportation Industry?

The Industry includes all businesses and agencies that move people or goods by:

AIR
Airports, but not
Airline Industry

LAND
Rail and Road

SEA
Seaports

What it takes to move things:
- Operations (Pilots, Drivers, Scheduling)
- Electrical
- Public Safety
- Logistics

What it takes to maintain infrastructure:
- Maintenance
- Mechanics
- Painters

What it takes to develop infrastructure:
- Urban Planning
- Engineering
- Manufacturing
- Construction
- Information Technology

What it takes to run transportation agencies & companies
- Management
- Human Relations
- Accounting
- Communications
- Project Management

The "Work-Based Learning Continuum"

Historically, educators believed that youth were not prepared to participate in work-based learning until they were in high school. New research and model programs have shown that, in fact, there is extreme value in exposing youth to multiple careers at a young age in order to pique their curiosities and support their exploration of future interests. The Work-based Learning Continuum displayed shows the types of activities that can be provided to youth as young as kindergarten and provides a guide for the specific types of programs that Metro could develop.

Work-based Learning Continuum

CAREER EXPOSURE

Learning about career pathway options and the relevant postsecondary offerings

CAREER PREPARATION

Practical, hands on experiences including exposure to a broad range of careers within a pathway and potential school-grade offerings

CAREER TRAINING

High level, hands on training in a specific career taught concurrently with relevant postsecondary coursework

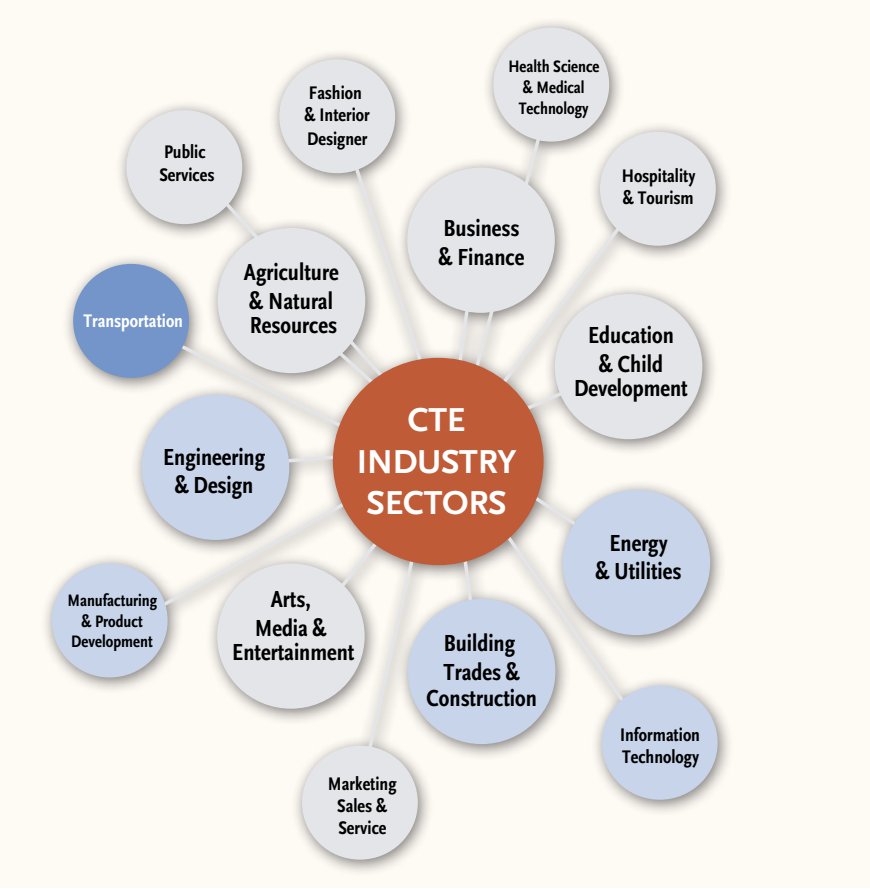
Types of Career Education Programs

This section highlights best practices in career education and outlines some model programs across the United States. *A summary chart of the different types of career education programs with details on specific regulatory requirements is included in Appendix A.*

Career Technical Education (CTE)

CTE is a school-based curricular pathway that combines rigorous academic content with career-aligned occupational skills training. Programs are designed to prepare students to be college and career ready by providing core academic skills, soft employment skills, and technical job-specific skills. CTE is a broad term used to describe any course or sequence of courses that is aimed at teaching students about a specific industry or trade. All of the other models described in this section are more specialized forms of CTE.

In the state of California, the CA Department of Education (CDE) recognizes 15 distinct industry sectors—including transportation—and upholds strict CTE standards. One such standard is requiring a specific CTE license that instructors must obtain in order to lead classes. Each sector contains multiple career pathways that inform program development. "Transportation" is one of the sectors, but it does not incorporate all of the many facets of the industry (such as engineering), as those have their own sectors. This sector division has not helped the public's understanding of the vast array of opportunities available in the Transportation Industry. The graphic to the right shows the 15 distinct California Department of Education (CDE) sectors.[15]



CTE courses are typically offered at high schools as electives for students. However, some schools place greater emphasis on CTE making it central to the school mission and a major curricular focus. An example of the latter is Aviation High School in New York City. This public high school provides students with a rigorous academic and technical program that prepares them to meet the educational challenges of the 21st century and a career in aerospace. Students take technical courses in an airplane hangar and complete relevant academic coursework. Students graduate in 4-5 years with a diploma and a license that certifies them to work in the aviation industry. The program is accredited by the Federal Aviation Administration (FAA). The school is said to certify more aircraft mechanics than any other program in the country.[16]

Career Academy

A Career Academy is a stand-alone school or program within a school that builds its academic program around a specific career industry/field. Similar to magnet programs, academies typically feature small learning communities which couple rigorous academics with intensive specialized education. Career Academies often have active Industry Partners, a committed team of high school teachers, and post-secondary partnerships.

[15] *"Career Technical Education." Career Technical Education - Curriculum & Instruction (CA Dept of Education), California Department of Education.*

[16] *Great Big Story. "Welcome to Aviation High School." Online video clip. YouTube. YouTube, October 27, 2016. [Accessed January 2018] https://www.youtube.com/watch?v=DF2TAvXoVTg]*

The recently launched Port of Long Beach Academy of Global Logistics (AGL) at Cabrillo High represents a successful local model of a Transportation Industry-focused career academy. The Port of Long Beach is the second busiest seaport in the United States and supports more than 316,000 jobs throughout Southern California. AGL was started in 2016 through a strategic partnership between the Port of Long Beach, Long Beach Unified School District (LBUSD), California State University Long Beach (CSULB), and the National Network for the Transportation Workforce (NNTW). AGL focuses on international trade, logistics, and supply chain management. The Port of Long Beach sponsors the school and provides mentors, guest speakers, field trips, tours, job shadowing, and internship opportunities for youth. Students obtain certifications and certificates offered by LBCC and CSULB.

Industry Linked Learning

Linked Learning is a program within a school that integrates rigorous academics with CTE and on-the-job training. Industry Linked Learning connects a student's educational experience to potential future careers by providing hands-on, real-world learning that is connected to the practical needs in the workplace.[17]

A notable local example of Linked Learning in Los Angeles is the partnership between the Da Vinci Schools and 72andSunny. 72andSunny is a creative advertising company; the Da Vinci Schools are a specialized network of schools serving homeless and foster youth in LA. The two organizations have partnered to create hands-on industry experiences and curriculum that support students in becoming well-rounded, valuable members of a skilled workforce. This "linked" arrangement benefits both students and the industry partner: "Students cultivate real skills for real jobs and a strong network of professional contacts, while Industry Partners gain access to a pipeline of talent and diversity for years to come."[18] Additionally, all program curricula is aligned with UC/CSU A-G requirements, which are necessary to qualify for admission to the UC/CSU systems. This thoughtfully designed school-Industry Partnership is an excellent model for Metro.

Industry-Aligned Project-Based Learning (PBL)

Students engaged in Industry-Aligned PBL gain knowledge and skills investigating and solving an authentic, engaging, and complex real-world question. Industry-aligned PBL includes coursework that is developed based on industry needs, and is embedded into student learning and outcomes. PBL is a key strategy for integrating career technical education lessons and concepts into students' regular academic coursework and it gives real-world relevance to otherwise abstract academic concepts.[19] For example, students might be assigned a project to build a functional robot that can help guide Metro patrons to the correct train platform. To complete the project, students must conduct research, apply math and electronic concepts, learn design software, and use language skills, both written and oral, to inform others how to operate the robot.

The Transportation-STEM (T-STEM) Academy, launched in Memphis, Tennessee in 2017, utilizes project-based learning to help students draw connections between schoolwork and future industry careers. Shelby County Schools partnered with the National Network for the Transportation Workforce's (NNTW) Southeast Transportation Workforce Center (SETWC) at the University of Memphis to develop T-STEM. The Academy currently offers 3 career pathways in Engineering, Aviation, and Transportation and Logistics. The school's mission is to implement a distinctive, high-quality problem-based approach. To this end, T-STEM works with over 25 Industry Partners—including FedEx, Cummins, and AutoZone—to provide Project Based Learning and other experiences for youth including mentoring, career expos, field trips, guest speakers, and internships.

Dual Enrollment

Dual enrollment allows students to be enrolled in both high school and college courses concurrently, with both institutions receiving state ADA/FTE funding for enrolled students. Under the dual enrollment model, students get a headstart by earning college credits and pursuing technical degrees and certificates while still in high school.

While many high schools across the nation offer some form of dual enrollment with local community colleges, the Early College High School in Newport-Mesa represents a particularly successful application of this model. Early College High

[17] *http://www.linkedlearning.org/en/about/linked-learning-course-list/*

[18] *72andSunny webpage. Retrieved January 2018.*

[19] *Buck Institute for Education. "What is Problem-based learning?"*

School is a collaborative effort between the Newport-Mesa Unified School District and Coastline Community College that was launched in 2006. ECHS is an academic program intended to enable students to pursue postsecondary education and a career path. It features 20 flexible and innovative dual enrollment courses with an applied learning focus. Upon completion of the program, students earn a high school diploma and transferable general education college credits, enabling them to attend college and pursue a career path.

Vocational/Trade School
Vocational schools are post-secondary institutions that train students to do jobs that require specialized skills. They are accredited institutions with the ability to issue certifications recognized by State and National agencies. For example, the Advanced Transportation and Manufacturing (ATM) Pathway at Los Angeles Trade Technical College (LATTC) is an example of a vocational training pathway at a local institution. The ATM Pathway programs enable students to gain the competencies needed to build credentials for lifelong career success in transportation and manufacturing. They offer multiple certificate and degree programs such as: Diesel, Hybrid Vehicle Technologies and Electronics Communications. The program not only features transit-focused curriculum for middle school and high school students, but also provides continuing education and training to journey-level technicians.

Internships
Internships are formal, employer led opportunities for students or those who are new to a field to gain practical experience in a specific field.

For example, the Metro Transportation Career Academy Program (TCAP) Summer Internship provides paid summer internships to over 150 junior and senior high school students annually. The program offers students an opportunity to learn about careers in the Transportation Industry and apply classroom theories and concepts to "real world" work situations.[20]

Apprenticeships
An apprenticeship is an employer-led career education model that allows participants to "earn-while-they-learn" skills through a blend of on-the-job training and classroom-based instruction. Formal apprenticeship programs are registered with the US Department of Labor (DOL) and individual state agencies. Apprenticeship programs typically include 2,000 hours of on-the-job learning and a minimum of 144 hours of classroom-based training and result in a "Certificate of Completion" which serves as a nationally-recognized portable credential. Youth apprenticeship programs typically function as a partnership between employers, high schools, and post-secondary institutions.[21]

The apprenticeship model is widely used in many European countries, including Germany and Switzerland. This model is gaining increasing popularity in the US, and has been implemented successfully in a number of states, such as Colorado (CareerWise Colorado) and South Carolina (Apprenticeship Carolina).

Essential Components of Career Education

There are a wide range of program models used to deliver career education to youth ranging from CTE-centered high schools to small linked learning communities, from employer-driven apprenticeships to career academies rooted in deep education-Industry Partnerships. Despite the diversity of program models used to provide career education to youth, a number of key themes and best practices are shared across programs. Below, 10 best practices for developing career education programs for Young Opportunity Youth are highlighted.[22]

[20] Los Angeles County Metro. (2017). Metro Career Pathways Report.; Los Angeles County Metro. (2017). Summer High School Internship Program Flyer.

[21] "Ayres, Sarah. A Policy to Expand Apprenticeship in the United States. Center for American Progress. 2013."

Table from "A Quick-Start Toolkit: Building Registered Apprenticeship Programs. Employment and Training Administration of the United States Department of Labor."

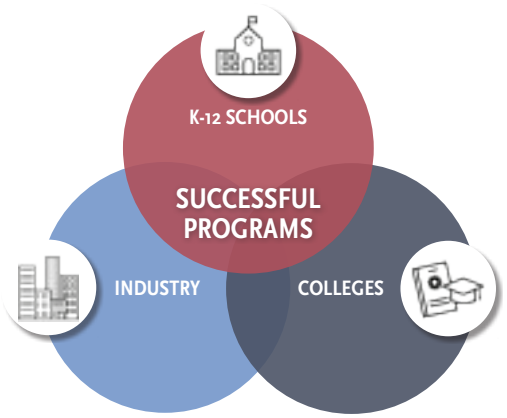
Parton, Brent. Youth Apprenticeship in American Today: Connecting High School Students to Apprenticeship. New America. December 2017."

[22] "Best Practices for Designing and Implementing CTE in your District." (2017, January). Edmentum.; ACTE. (2018) "Career Exploration in Middle School."

1. Successful career education programs are developed and sustained by a collaborative group that includes K-12 schools,industry, and post-secondary institutions. K-12 educators are needed to implement the education, Industry Partners are needed go provide real world experiences and ensure that education is industry-relevant, and post-secondary institutions are needed to align career training to college credits and credentials.

2. Create opportunities for students to build skills and connections in the industry. Another key feature of successful career education programs is that they connect youth to opportunities in the real world. It is important to ensure that career education include the ability for students to apply their classroom knowledge through on-the-job training, job shadowing, or other opportunities. These real-world experiences also provide chances for students to create authentic relationships with successful people in the working world who can help connect them to future opportunities.

Key Stakeholders for this Project



3. Create small, diverse learning communities The smaller scale of small learning communities enable students to receive higher quality career education. This small school feel can be produced by creating cohorts of teachers and students and personalized support systems. The sense of community created by small cohorts is also important for Young Opportunity Youth, who may lack this support and sense of belonging in their day-to-day lives.[23]

4. Connect to A-G requirements and post-secondary education and certificates. Whenever possible, align programs to UC/CSU A-G requirements. A-G College Entrance Requirements are a sequence of high school courses that students must complete (with a grade of C or better) to be minimally eligible for admission to the University of California and California State University schools. By linking A-G coursework to career education, students can develop technical skills while also moving closer to entering college—a true marriage of college and career-readiness. Programs should also partner with local post-secondary institutions to provide technical certifications and national industry-based portable credentials.

5. Start early. Career awareness/exploration during elementary and middle school sets the stage for future success. It is never too early to start getting students to think about their futures; therefore, do not reserve career education solely for high school. It is important to introduce youth to a range of industries and careers so they understand the world beyond doctor, teacher, fireman, etc. and begin to understand that the world has countless career options. The goal is to build awareness and experience in preparation for more intensive secondary experiences.

6. Make career education memorable and fun. Career education should be fun and engaging for students. It is an area where students who may not shine in typical academic environments can flourish and build confidence. Expose and engage youth to a variety of industry opportunities and events. Use hands-on relevant learning opportunities. Get students out of the classroom and into real world and industry spaces.

[23] *Coleman et al. (1966). Mickelson & Bottia, 2010; U.S. Department of Education. (2011)*

Educating Young Opportunity Youth

The Metro E3 Initiative seeks to serve youth from diverse backgrounds including youth who are at risk of being or already are involved in the County's child welfare, probation, and homelessness systems. In addition to the best practices of providing career education, a number of best practices exist regarding how to educate Young Opportunity Youth.

An educational program for Young Opportunity Youth has additional demands that a traditional school or educational program may not already have. A program for Young Opportunity Youth must:

- Address life challenges and barriers to education and career. Programs that seek to serve this population should provide intensive wrap-around services including: counseling and mental health support, legal aid, childcare, drivers license, housing, transportation, or other barriers.
- Teach life skills and job readiness skills such as financial literacy, time management, professional attire, professional communication.
- Train all staff in trauma-informed care and basic case management.
- Build diverse learning communities that include various socio-economic levels. Research proves that students thrive in diverse communities where students can learn from the experiences of one-another.
- Industry Partners willing to hire these youth must want to do this work and understand the challenges they will face. Employers must be prepared to guide soft skills development as well as technical skills.

How to Meaningfully Marry the Needs of Industry and Education:

The best practices research revealed a number of program models and design elements that Metro should take into consideration while designing and implementing educational programs for youth. Even so, there are a handful of key takeaways for Metro regarding how to meaningfully marry the needs of an industry partner and the educational needs of youth. These are listed below.

1. Include an influential employer champion
2. Lead with industry needs and demand
3. Attain buy-in from 3 key stakeholders: K-12 schools, industry, and colleges
4. Provide holistic training that prepares youth for career, college, and life
5. Provide transferrable industry skills
6. Ensure clear upward-mobility positions for youth and clear industry pathways exist
7. Merge hands on training and classroom instruction, and place an equal emphasis on career-and college-readiness

SECTION 4: EDUCATIONAL PHILOSOPHY OF THE E3 INITIATIVE - HOW TO ACCOMPLISH THE MISSION

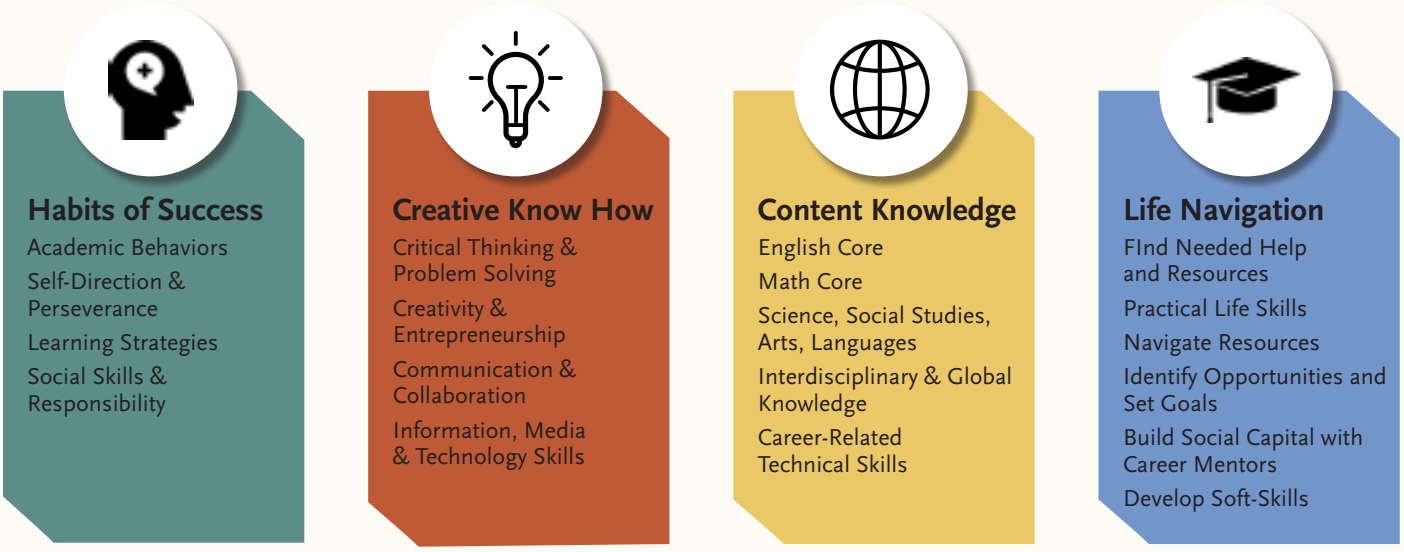
The Educational Philosophy of the E3 Initiative is greatly informed by the Next Generation Learning Challenges' (NGLC) MyWays Student Success Series reports. NGLC supports educators who are reimagining public education and developing innovative educational models. The MyWays Student Success Framework provides a synthesis of the core competencies that students need in order to succeed in learning, work, and life in the rapidly evolving and high-tech world in which we live. The MyWays framework is developed to be applicable to all students, regardless of academic aptitude or socioeconomic circumstance, "including those who must overcome the extraordinary challenges of intergenerational poverty and racial discrimination." The overarching goal of the MyWays framework is to, "ready each student for their journey through the 'wayfinding' decade of learning and working that follows high school." This directly aligns with Metro's vision and mission to *Prepare Los Angeles County youth for career and college pathways in the global Transportation Industry by teaching them transferrable STEAM industry skills.*

Educational Philosophy of the E3 Initiative

Students today are growing up in an era of rapid technological change, industry shifts, cultural change, and increasing demands. Therefore, students' educations should also reflect these constantly changing dynamics that are affecting their lives and their prospects following high school graduation.

The E3 Initiative seeks to directly address how the education system can prepare for this ever-changing world. The four domains of the initiative are Habits of Success, Creative Know-How, Content Knowledge, and Life Navigation. Habits of Success entails providing resources and tools so that students can develop healthy school and work habits. Creative Know-How encourages students to flex their creative muscle to answer unasked and yet-unanswered questions. Content knowledge provides a base of knowledge so that students are well-equipped with core subject knowledge such as Math and English. Lastly, Life Navigation is a vital, yet undervalued component of a successful education system—beyond school, students must be able to tackle challenges they encounter and troubleshoot personal and professional problems. These four domains prepare students for life both inside and outside of the classroom.

Provide Students with the Skills Needed to Survive and Thrive in School and Life



This educational philosophy reflects a radical shift in the meaning of student success. Instead of the traditional goal to teach for proficiency in a common set of narrow academic competencies, the E3 iniative adjusts and tailors a broader and deeper array of competencies based on each student's interests and talents.

[24] *Lash, Dave and Belfiore, Grace. Introduction and Overview of the MyWays Student Success Series. NGLC. October 2017. Retrieved from: https://s3.amazonaws.com/nglc/resource-files/MyWays_00Introduction.pdf*

SECTION 5: TRANSPORTATION SCHOOL

Metro Transportation School Signature Practices

At the heart of the E3 Initiative is a vision for a state-of-the-art transportation school that prepares Los Angeles County youth for career and college pathways into the global Transportation Industry. In order to assess the feasibility of developing a Transportation School, Metro's leadership adopted a list of the non-negotiable practices that must be included in the school. This list of "Signature Practices" includes elements that are essential to serving a diverse student body including Young Opportunity Youth who often need additional supports in order to succeed in school and life.

INDUSTRY CONNECTED PROJECT BASED LEARNING: Students learn by engaging in projects that are co-created by industry practitioners and teachers. Projects are hands-on, connect to real world challenges, and embed industry professionals in project design, review, and presentation phases.

CONNECTED WORK-BASED LEARNING: Students learn and practice real-world skills while developing a network of career connections through internships, social enterprises, mentorships, and other Real World Learning opportunities. Students learn strategies to leverage that network for future opportunities.

FAMILY AND COMMUNITY CONNECTED: Students are civically engaged, active participants in the continual improvement of the surrounding community. Community service and community inclusion are embedded throughout the school culture and curriculum. Community stakeholders are active participants in the school design and growth process.

WRAP-AROUND SERVICES: Students receive supports that address barriers to success in education, career, and life. This includes housing support, mental health needs, public assistance, health care, etc.

DUAL ENROLLMENT AND INDUSTRY CERTIFICATIONS: Students are provided pathways that mandate dual enrollment in college courses while in high school; this gives them the potential to graduate with an AA degree. Students also have the option to attain industry certifications and successfully transition into college and career.

RESTORATIVE JUSTICE: School discipline focuses on repairing harm through inclusive restorative justice practices that engage all stakeholders rather than punitive measures. Practices allow offenders the opportunity to take accountability for the harm they caused, take action to repair that harm, and restore trust in the school community.

COUNSELING THROUGH CAREER: Students receive counseling supports that help them navigate career options,college applications, financial aid (FAFSA), scholarships, etc. and follow students through their post high school experience into their second year of college and/or career.

TECHNOLOGICALLY ADVANCED: Students have one-to-one computer access and understand how to use a host of computer programs. Curriculum leverages basic computer-based technology skills as well as career-aligned technology programs such as CAD. When appropriate, students participate in flexible, self-paced learning opportunities.

PRESENTATIONS OF LEARNING: Learning does not just live within the classroom walls. Students have multiple opportunities to showcase their work to a community and real-world audience through presentations, competitions, exhibitions, etc.

LIFE SKILLS: Skills needed for life and career, such as persistence, communication, professionalism, and public speaking, are embedded into multiple aspects of curriculum design so students are equipped to thrive in the 21st century workforce

Metro Transportation School Signature Practices

At the heart of the E3 Initiative is a vision for a state-of-the-art transportation school that prepares Los Angeles County youth for career and college pathways into the global Transportation Industry. In order to assess the feasibility of developing a Transportation School, Metro's leadership adopted a list of the non-negotiable practices that must be included in the school. This list of "Signature Practices" includes elements that are essential to serving a diverse student body including Young Opportunity Youth who often need additional supports in order to succeed in school and life.

Multiple other schools incorporate some or all of these signature practices into their school designs and have been successful.

These Signature Practices should provide the base for a charter school petition and serve as a type of "constitution" for all programming that is designed for the school.

Wall to Wall School Career Pathways

In order to develop a Transportation School that is truly connected to the transportation and infrastructure industries and provides relevant career education and skills, Metro must develop a school with "wall-to-wall" career academies. This means that the school will have multiple career pathways (typically 3-4) that students can choose and follow throughout their time at the school and every student will be in one of the pathways.

These pathways must be designed and selected based on a variety of factors including:

- Existence of entry-level positions in that pathway and the transportation and infrastructure industries;
- Ability to teach some of the core competencies needed in the pathways' industry careers to high school students;
- Student interest in the various pathways;
- Feedback from educators regarding ability to teach pathways well;
- Number of similar existing pathways in area schools;
- Interest and ability of Industry Partners to play an active role in the school.

The specific school pathways have not yet been selected, as it will be the school operator's decision to select which pathways they believe they can implement well. The table below lays out eight potential school career pathways. Appendix B provides additional information about these potential pathways. Regardless of the pathway a student chooses, each will receive a comprehensive education about the Transportation and Infrastructure Industries and learn key industry skills that are transferrable to any career each choose in the future.

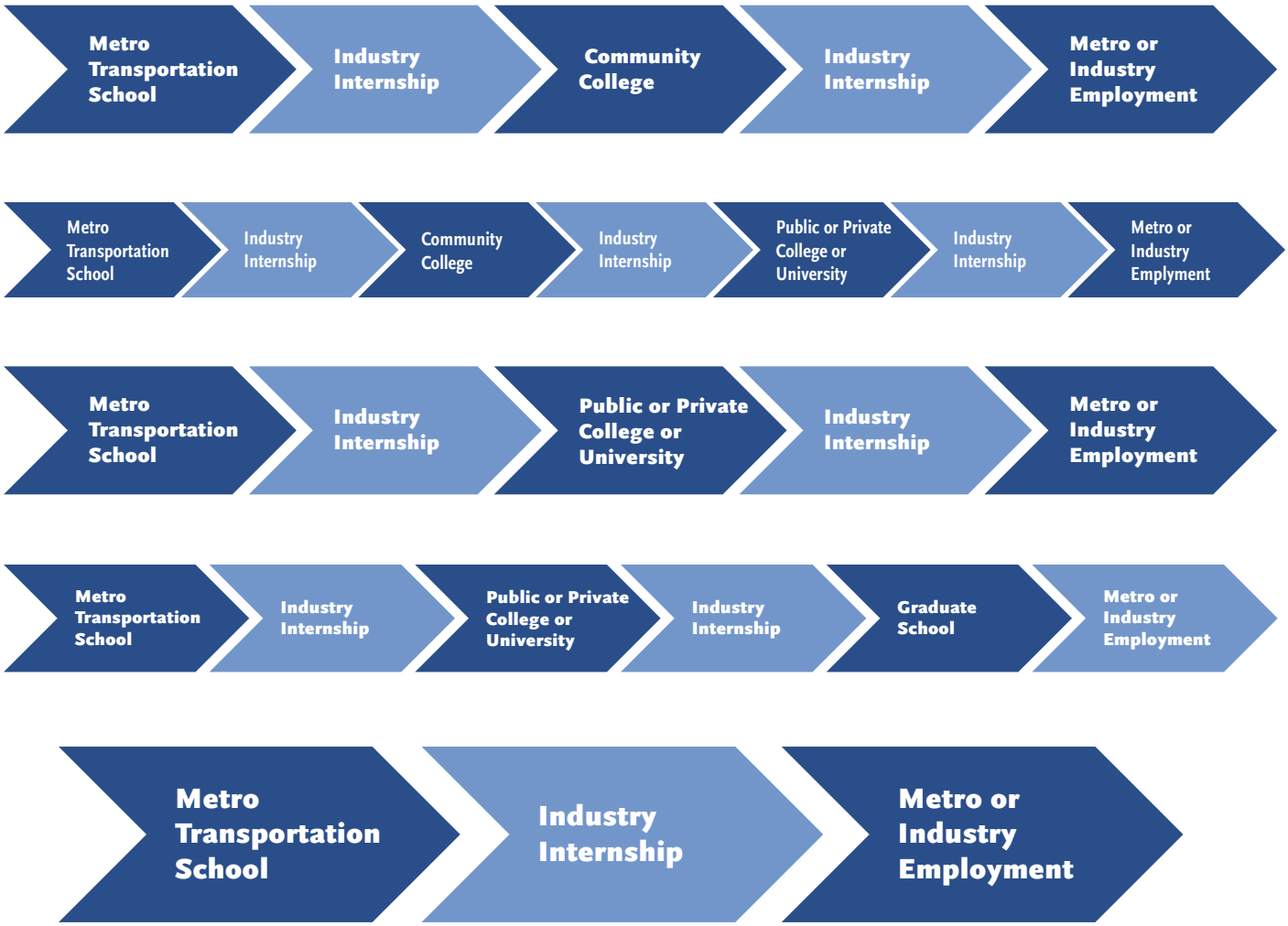
Potential Career Pathways in the Metro Transportation School

PATHWAY	PATHWAY EXPLANATION
Information Technology	Students learn how to use computers to store, retrieve, transmit, and manipulate data, or information, in the context of the Transportation Industry.
Engineering	Students learn the basics of engineering by taking math courses, learning industry skills and programs such as Computer-Aided Drafting (CAD), project management, blueprint reading, and technical report writing.
Business Operations (Marketing, Human Resources, Finance, Audit, Accounting, Budgeting, etc.)	Students learn multiple business skills needed to run a large transportation agency including: bookkeeping, office administration, project management, marketing strategy, etc.
Construction and Trades/ Infrastructure	Students learn skills in multiple core trades including metal working, painting, construction, etc.
Mechanics and Operations (Bus & Rail Operators, Mechanics, etc.)	Students learn about the mechanics of the Transportation Industry and learn the basics of how to operate and fix buses, trains, and rail cars.
Global Trade/Logistics/ Supply Chain Management	Students learn warehousing and inventory control practices, computer systems used in the industry, and technical skills.
Civics & Public Policy (Urban Planning, Law, Community)	Students learn about the public-facing side of the Transportation Industry including transportation policy analysis, land use planning and regulations, community relations, and relevant software.
Safety (Security/Police)	Students learn about careers in the public safety realm and skills needed to be a police officer, transit security officer, or other public safety official.

In addition to specific curricular career pathways that students opt into in the school, students will have a variety of educational options upon high school graduation.

At least five continuing educational options are possible for Transportation students. In the first, students will matriculate through the Transportation School, complete an Internship, and assume full-time employment at Metro. Others may attend a local community college and then acquire full-time employment at Metro or with an industry partner. A concurrent enrollment option for high school students will allow graduates to earn both a high school diploma and an Associate of Arts degree simultaneously. A third option facilitates students enrolling in a public or private college or university after attending a community college, and before assuming full-time employment in the Transportation Industry. Students might also enroll in four-year institutions immediately after graduating from high school before seeking full-time employment at Metro. Finally, some students may be interested in careers that require a graduate degree such as Urban Planning or Law.

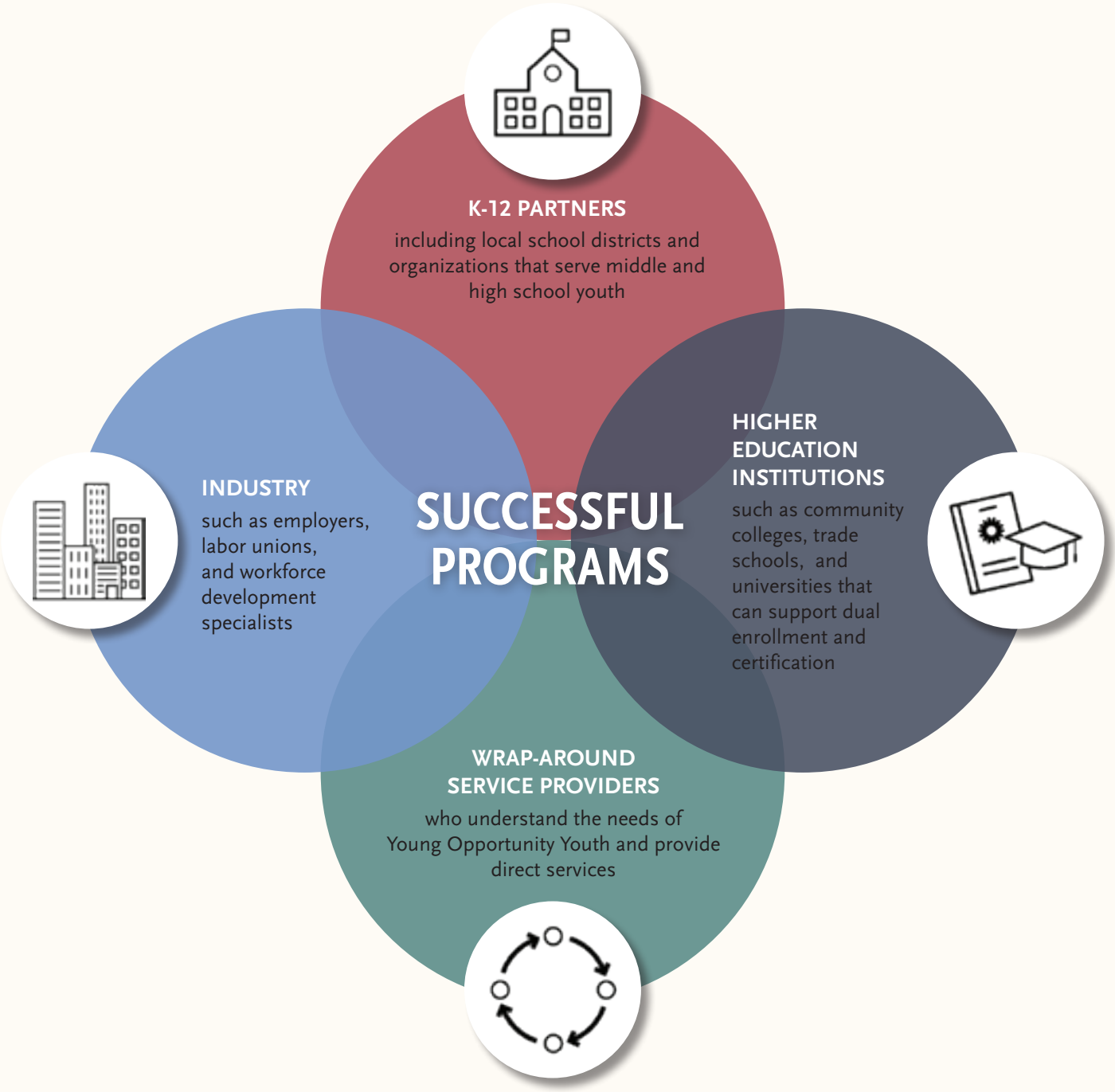
Continuing Education and Career Options Available to Transportation School Students:



SECTION 6: ESSENTIAL PARTNERS AND RECOMMENDED ROLES

The best practices research showed that successful industry-aligned educational initiatives for youth engage a cross-sector group of stakeholders including K-12 partners, higher education institutions, and Industry Partners. The transportation school seeks to serve a diverse group of students including Young Opportunity Youth, and therefore must also include wrap-around service providers. Together, these institutions have the knowledge and experience to educate youth, employ youth, and address barriers to education and employment for students and their families.

Key Stakeholders for this Project



Criteria for School Design Structure Assessment and Selection

In April 2018, Metro launched a Transportation School Working Group in order to include and engage these four key stakeholder groups.

The purpose of the working group is to provide suggestions and feedback on Metro's E3 Youth Education Initiative, support the design of the Transportation School, and identify programmatic partners in order to design innovative programs that are ambitious, sustainable, and collaborative.

Metro also developed an internal working group that includes a small and committed group of Metro employees that serve as thought partners and active participants in the creation and implementation processes. The internal group is essential to the creation of educational programs that are industry-aligned.

The Transportation School Working group has met twice and is schedule to meet monthly moving forward. The following organizations have sent representatives to the past two working group meetings.

Working Group Meeting Attendees

K-12 PARTNERS	HIGHER EDUCATION INSTITUTIONS
• Los Angeles Unified School District's Linked Learning & Career Technical Education Office • Los Angeles County Office of Education • ITEP- International Trade Education Programs • Da Vinci Institute	• California State University Los Angeles • Los Angeles Trade Technical College • East Los Angeles College • Cerritos College • Long Beach City College • California Community College's Economic and Workforce Development Program's Clean Energy and Transportation Initiative (CETI)
INDUSTRY	**WRAP-AROUND SERVICES**
• LA/OC Building & Construction Trades Council • Port of Long Beach • Los Angeles Chamber of Commerce • Los Angeles World Airports (LAWA) • Los Angeles Department of Water & Power	• Los Angeles County Probation Department • Los Angeles County Department of Children and Family Services • Los Angeles County Workforce Development and Community Services • City of Los Angeles Workforce Development Department

Representatives from elected officials' offices have also attended these Transportation School Working Group meetings, including staffers from Mayor Garcetti's Office, LA County Board District 2 and 3, and LA City Council District 2.

Roles for Working Group Partners

Working group participants each bring unique skills and expertise that are essential to the success of the Transportation School and all future E3 programs. Most partners can contribute in multiple ways, yet have true expertise in a few key roles. The following potential roles for partners emerged out of the best practices research.

The "Partner Agency Report" provides in-depth profiles of each of the recommended partners to include in the Working Group as well as suggested roles they can play in the E3 Initiative and in the planning for the Transportation School.

ROLE	DEFINITION	POTENTIAL PARTNERS
Conveners	These organizations are skilled at convening a diverse network of stakeholders and keeping them aligned and engaged in cross-sector initiatives.	• Los Angeles Trade Tech College (LATTC) • Los Angeles Area Chamber of Commerce • UNITE-LA • Southern California Regional Transit Training Consortium (SCRTTC)
Industry-Aligned Curriculum & Educational Innovation	These partners ensure that the educational content is aligned with current industry needs and standards. They also assist with designing innovative and real-world learning experiences that will enhance students' understanding of the industry, such as class competitions, projects based on industry challenges, behind-the-scenes tours, guest speakers, mentors, and internship opportunities.	• Da Vinci Institute • Los Angeles Trade Tech College (LATTC) & Transportation Workforce Institute (TWI) • LAUSD Career Technical Education (CTE) & Linked Learning Office • International Trade Education Programs (ITEP) • Southern California Regional Transit Training Consortium (SCRTTC) • Clean Energy and Transportation Initiative (CETI) - Transportation Sector • Los Angeles World Airports (LAWA) • LA/OC Building & Construction Trades Council • Port of Long Beach • New America, Center on Education and Skills
Technical Assistance & Compliance	These partners help to navigate state and federal compliance requirements and strategize on how to align the initiative with other programs to open up opportunities. For example, these partners can help ensure that curriculum is designed to meet CA Career Technical Education(CTE) requirements and, when possible, that students receive industry certifications and/or college credit for their coursework.	• Los Angeles County Office of Education (LACOE) • LAUSD Career Technical Education (CTE) & Linked Learning Office • Los Angeles Trade Tech College (LATTC) & Transportation Workforce Institute (TWI) • Southern California Regional Transit Training Consortium (SCRTTC) • LA/OC Building & Construction Trades Council • New America, Center on Education and Skills
Financial Advice	These partners help to identify and secure funds for the initiative such as government grants, philanthropic support, and donations from private donors.	• Southern California Regional Transit Training Consortium (SCRTTC) • LA/OC Building & Construction Trades Council • New America, Center on Education and Skills
Marketing & Outreach	These partners help to recruit eligible students and support marketing and outreach campaigns that raise awareness and elevate the profile of the Initiative.	• UNITE-LA • Dept. of Children and Family Services (DCFS) • LA County Workforce Development, Aging, and Community Services (WDACS) • Los Angeles County Probation Department
Wrap-around Services Providers	These partners provide students and their families with supplemental supports and wrap-around services that support their academic, career, and life success. Services vary from financial literacy workshops to housing support.	• Dept. of Children and Family Services (DCFS) • LA County Workforce Development, Aging, and Community Services (WDACS)

Metro's Role In Developing And Sustaining A Transportation School

Throughout this project multiple people have posed the question:

> ***"As a public transportation agency with no expertise in K-12 education, what is Metro's role in a transportation school?"***

Metro aspires to be an extremely engaged founding Industry Partner that supports the school's development of transportation and infrastructure industry career exposure, education, and employment programs. Metro is a public transportation agency that is "responsible for the continuous improvement of an efficient and effective transportation system for Los Angeles County".[25] Metro is not interested in becoming a K-12 education provider and does not want to stray from its core competencies.

Typically, the most significant hurdle when building a new school is securing a site. LA County has overcome this hurdle, allowing Metro to focus on the other components for the project.

> ***Metro's role is to provide students with the skills needed in the workplace that cannot be taught within the core academic curriculum.***

[25] *Metro Mission Statement. Retrieved from: https://www.metro.net/about/about-metro/*

Some tasks and responsibilities that could be in Metro's purview include:

1. Develop transportation and infrastructure Industry curriculum that aligns with Metro's standards and workforce trainings that the school operator can embed in multiple classes through project-based learning.
2. Provide Metro employee support in the form of guest speakers, project mentorship, mock interviews, job shadowing, and curriculum collaboration.
3. Provide E3 supplemental programming such as internships and a range of innovative hands-on, work-based learning programs that support student learning about the Global Transportation Industry.
4. Build an innovative state-of-the-art Vocational Training Center that promotes innovation in the field, supports student hands-on learning on-site, and expands opportunities for disadvantaged residents from across the County to experience opportunities for job training to prepare themselves for careers in the transit Industry.
5. Provide teacher professional development that exposes and educates them about the global transportation and infrastructure industries.
6. Facilitate partnerships utilizing Metro's vast network to connect the school and vocational training center to additional employers, funding, and opportunities when possible.
7. Support recruitment and outreach to youth from the County's safety net, along with youth from across the County, to a college-preparatory boarding academy that specializes in inspiring and training youth to pursue careers in the Transportation and infrastructure sectors.
8. Support school branding efforts by providing Metro design elements and actual Transportation Industry equipment. (I.E.: Retrofitted retired railcar could become an outdoor sitting area)
9. Support student transportation needs by providing free or reduced transportation to students career aligned opportunities such as internships.
10. Connect graduating students and families to the WIN-LA program.

Los Angeles County's Role in Developing and Sustaining a Transportation School

Los Angeles County will support the school by connecting the operator to relevant partners and agencies. Some tasks and responsibilities that should be in the County's purview include:

1. Explore policy changes that support a boarding school model.
2. Support the development of a fund-development plan that makes the boarding school model sustainable in the long-term and identifies ways to fund the anticipated gap subsidy.
3. Utilize the County's vast network to connect the school and vocational training center to additional funding, employers, and opportunities when possible.

School Operator's Role in Developing and Sustaining a Transportation School

The school operator will provide the core educational program, boarding school element, and ensure that students meet A-G requirements and graduate from high school career, college, and life ready. To ensure that the school is a state-of-the art, innovative, Transportation Industry-aligned school, the school operator will also have to partner with Metro and other Industry Partners to ensure that the school's curriculum and programing provides students with transferable STEAM skills that are relevant to the ever-evolving industry and careers of the future.

Some tasks and responsibilities that could be in the school operator's purview include:

1. Create a wall-to-wall Industry pathway model aligned to living wage careers.
2. Create a school design that incorporates all of the Metro Transportation School Signature Practices such as including Project Based Learning, Habits of Success, Content Knowledge, Creative Know How and Career Navigation in learning design and assessment practices.
3. Develop a innovative school schedule that facilitates career opportunities to be incorporated into the school day, rather than only after-school. The schedule will value and support project based learning, internships, and work-based experiences that will often take place off of the school campus.
4. Ensure that place-based learning such as internships, mentorship, workshops and tours are made available.
5. Provide time for staff and educator professional development to support learning about the Transportation Industry.
6. Partner with community colleges and other innovative higher education partners to develop articulation agreements so students earn college credits for coursework completed in high school with the ultimate goal of graduating students with an AA degree and an Industry credential.
7. Develop formal MOUs and partnerships with community organizations to provide culturally sensitive wrap-around services for students.
8. Provide robust college and career counseling.

Successful traditional schools include cross sector partnerships and collaboration. This boarding school must be a cross-sector collaborative effort in order to provide students with the innovative educational experience they deserve!

SECTION 7: SCHOOL DESIGN STRUCTURE ASSESSMENT

School leaders and educators can implement the Educational Philosophy, the 10 Signature Practices, and the Wall-to-Wall Career Pathways in a variety of settings; traditional district schools, charter schools, private schools, probation camp schools, and boarding schools could all adopt these frameworks and approaches. The school structure options examined fell into two broad categories: redesign an existing school or create a new school. Four potential scenarios were identified within each category.

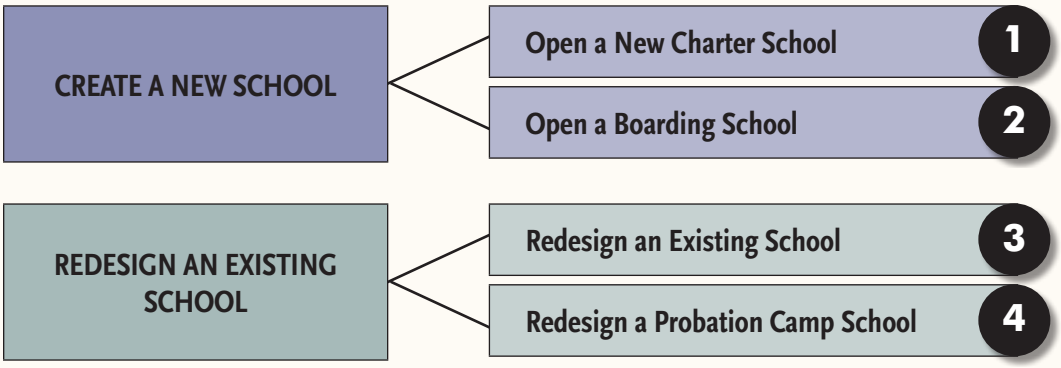
School Structure Options

	REDESIGN AN EXISTING SCHOOL	CREATE A NEW SCHOOL
1	Establish a Transportation Academy within an existing district school	Create a new district school
2	Create a magnet track within an existing district school	Create a new independent charter school
3	Change the focus of an existing charter school to transportation	Create a new school within an existing Charter Management Organization (CMO) network
4	Redesign the curriculum of a Probation Camp so that it is transportation-focused	Create a boarding school

Criteria for School Design Structure Assessment and Selection

Of these potential school structures, four school structure options were selected and analyzed based on customized criteria for the Metro Transportation School. These criteria integrate Metro's priorities and the key outcomes that Metro leadership wants the Transportation School to deliver. Two school structure options were selected from each option of redesigning an existing school and creating a new school.

Four School Structure Options Assessed:



CRITERIA	SUBCRITERIA
Depth of Industry Learning	• Ability to align curriculum to Transportation Industry • Ease of Industry partner inclusion
Stakeholder Buy In	• Teacher Buy-in/Staffing • Student Perception- Students' desire for a program like this • Political Buy-in—Likelihood for community support or opposition • Political will and momentum to implement
Impact	• Number of youth who can be served • Capacity to serve Young Opportunity Youth by addressing life challenges and barriers to education and career (wrap-around services) • Degree to which program can be scaled
Cost and Funding Sustainability	• Cost • Sustainability of funding
Innovativeness	• Ability to incorporate emerging technology • Likelihood to generate excitement and acclaim
Complexity of Start-up	• Timeline to serve first class/begin program • Ease of program start-up (licensing, certification, authorization, credentialing, staffing) • Ability to recruit and enroll students
Nimbleness (Autonomy)	• Ability to manage complex education bureaucracies and maintain a level of autonomy • Ability to react and adjust to changing needs, circumstances, and climates in a timely manner
School Culture	• Ability to create a healthy school culture

The following SWOT tables summarize the key strengths, weaknesses, opportunities, and threats of redesigning an existing school and of creating a new school.

SWOT TABLE: Redesign an Existing School

STRENGTHS	WEAKNESSES
• Can focus on Metro aligned curriculum • Can build on existing assets • May build community goodwill if community had expressed interest in improving the school • Linked Learning Schools can lean on the support and funding of District Linked Learning and CTE Office • Less funding likely needed to retrofit an existing school versus prepare a site to be a school • Will not need to recruit new students	• Structure and flexibility depends on preexisting district policies • May be challenging to adjust the school's schedule to accommodate out-of-school activities such as job shadowing and/or field trips • Culture of a school is very difficult to change • If staff, community, and students are not involved in the decision process, they can be resistant to the change • Community may be skeptical if the school has seen multiple reform efforts with little impact • Cannot leverage additional charter school funding and grants • Will not have as much autonomy if a charter school
OPPORTUNITIES	**THREATS**
• Can be seen as trying to work within the system • If staff, community, and students are involved in the process, this can be an exciting change that garners good will • Higher accountability for spending • There is potential to leverage training for changing school culture • Partnering with a public district may bring political good will to Metro	• When teachers and staff are told their "old" way is not working, they may be resistant to change • Returning staff may not have a commitment/desire to serve Young Opportunity Youth • Traditional schools have programmatic funding restrictions that may lead to necessitating spending on unwanted tools. • Ability to react and adjust to changing needs, circumstances, and climates in a timely manner will depend on the strength of the school's leadership

The most challenging aspects of redesigning an existing school include:

- Operating with limited flexibility and autonomy
- Resetting the school culture
- Integrating new staff members whose experience and skills align with the redesigned school's new focus

The most appealing benefits of redesigning an existing school are:

- Lower start-up costs
- Quicker timeline to open

A redesigned school may need some additional funds for Transportation-Specific equipment and for aesthetic improvements to the campus, but funding for a new facility would be unnecessary because a campus and school buildings already exist. Furthermore, if key partners are aligned and committed to a speedy timeline, the redesigned school could potentially open within a year.

SWOT TABLE: Create a New School

STRENGTHS	WEAKNESSES
• Student and staff buy-in is often higher when creating a new school • Can hire specifically for the student population the Metro school is serving • Grants available for new school models • More autonomy • Easier to create a positive school culture from scratch than to change an existing culture	• Starting from scratch can be chaotic • Charter schools may not be eligible for certain state funding initiatives • LA area has seen push-back for new charter schools • Charter Petitions take a year to write and get approved • Recruiting and enrolling new students can be difficult • Expensive to retrofit a school site or build a new facility
OPPORTUNITIES	**THREATS**
• There are currently many school-start-up grants for charter schools. • A Metro school start-up would likely garner a lot of attention • Countywide Benefit Charter structure may open the door to collaboration across districts if there is minimal duplication of potential youth served	• Resistance to new school start-ups • Charter schools must renew their charter petitions • Potential anti-charter legislation could be introduced

In contrast to the challenges of redesigning an existing school, the most challenging aspects of starting a new school from scratch are the considerably higher start-up costs and elongated start-up timeline. The construction of the new facility would likely take one year; and securing the necessary financing for the construction could take just as long or longer.

Even with these significantly higher costs, a Transportation Industry-aligned school can not be fully actualized by redesigning an existing school. The core philosophies and practices of running a career pathways school can be implemented through a new school because a new school has:

- ✓ **School Stakeholder Buy-In:** The entire team of school leaders, teachers, parents, and students are brought into the school vision.
- ✓ **Positive School Culture:** The opportunity to cultivate a positive school culture from the very beginning of the school design through the school's opening.
- ✓ **Industry Partnership Alignment:** The opportunity to develop the school in partnership with Industry Partners to ensure that school curriculum and programing are Industry-Aligned.
- ✓ **Fresh Wall-to-Wall School Design:** The ability to create a cohesive school design that aligns curriculum, schedule, budget, staff, and professional development to the vision of a transportation school and specific outcomes.
- ✓ **Autonomy:** The ability to recruit and hire staff that are aligned to the mission and vision of the school and have the industry skills needed to implement the model.

In addition to assessing the strengths and challenges between redesigning an existing school and starting a new school, the four potential school structure options were assessed and scored using the criteria above. These are graded in the table below and include the following: Redesign a Existing School, Redesign a Probation Camp School, Start a New Charter School, Start a Boarding School.

The redesign of a probation camp school option received the highest score (57 points). However, the scores were not significantly higher (just 7 points) than the start new school options.

School Structure Options Comparison

			Redesign Existing School		Start New School	
CRITERIA	**SUB-CRITERIA**	**SCALE**	Redesign District School	Probation Camp School	Charter School	Boarding School
Depth of Industry Learning	Ability to align curriculum to Transportation Industry	5 = Very Easy Alignment, 1 = Very Difficult Alignment	4	2	4	4
	Ease of Industry Partner inclusion	5 = Great, 1 = Bad	3	3	3	4
Stakeholder Buy In	Teacher Buy-in/Staffing	5 = Love, 1= Dislike	3	4	3	4
	Student Perception—Students' desires for a program like this	5 = Love, 1= Dislike	3	4	3	4
	Political Buy in—Likelihood for political support or opposition	5 = Support, 1= Oppose	4	5	2	3
Impact	Number of youth who can be served	5 = 1,000+ 4 = 501-999 3 = 201-400 2 = 51-200 1= 1-50	5	4	3	2
	Capacity to serve Young Opportunity Youth by addressing life challenges and barriers to education and career (wrap-around) services)	5 = Very Strong Capacity, 1 = Very Limited Capacity	3	5	4	5
	Degree to which program can be scaled	5 = Very Scalable, 1= Not Scalable	4	4	4	2
Cost and Funding Sustainability	Cost	5 = Little to No New Funding Needed 1 = Significant Investment	5	2	2	1
	Sustainability of funding	5= Very Sustainable, 1=Difficult to Sustain	3	3	3	1
Innovativeness	Ability to incorporate emerging technology	5 = Great, 1 = Bad	3	2	4	5
	Likelihood to generate excitement and acclaim	5 = Very Well Received, 1 = Negative Response	3	5	3	4
Complexity of Start-up	Timeline to serve first youth/begin program (Licensing, certification, authorization, credentialing, staffing)	5 = 1-3 Months, 4 = 3-6 mos., 3 = 7-12 Mos., 2 = 1-1.5 Yrs., 1 = 2 Yrs.+	3	3	2	1
	Ability to recruit and enroll students	5 = Very Easy, 1 = Very Difficult	4	5	2	2
Nimbleness (Autonomy)	Ability to manage complex education bureaucracies and maintain a level of autonomy	5 = High Degree of Autonomy, 1 = Very Limited Autonomy	2	3	4	4
School Culture	Ability to create or reset a healthy school culture of excellence	5 = Very Easy, 1 = Very Difficult	3	3	5	4
		TOTAL	**55**	**57**	**51**	**50**

Top Choice: Boarding School Option

The results of the school structure comparison captured the benefits and challenges of each option, yet it did not reveal an undeniable top choice. The results varied, but there was no clear front-runner. Therefore, it was necessary to consider which criterion was of most importance. Among all the criteria, "Criterion 3: Impact" was identified as most important. Ensuring that Young Opportunity Youth successfully graduate from the Transportation School with improved life prospects is of the upmost importance. And research has proven that youth who grow up in stressful home circumstances often thrive in supportive 24-hour learning environments that provide wrap-around services alongside academic preparation.[26]

A unique strategic partnership opportunity in Los Angeles County District 2 also elevated the boarding school option to the top choice. Los Angeles County successfully acquired a 4.2-acre property at the intersection of Vermont Avenue and Manchester Boulevard in South Central Los Angeles through eminent domain. This unoccupied site has experienced blight and neglect for over twenty years due to repeated development challenges and failure to start.

County Supervisor Mark Ridley Thomas is actively coordinating County resources to revitalize the community immediately surrounding the site. Los Angeles County plans to construct a mixed-use transit-oriented development that will include a transit plaza, affordable housing, a Vocational Training Center, and other community-serving amenities such as a grocery store and small coffee shop.

By placing the Transportation School on this property, students will have direct access to these amenities and resources. And while the Transportation School will be open to youth from across the County, Metro and LA County are committed to recruiting and encouraging local residents, especially Young Opportunity Youth, to enroll if they believe the school is a good fit for them.

Typically, the most significant hurdle when building a new school is securing a site. LA County has overcome this hurdle, allowing Metro to focus on the other components for the project.

In addition to the support of Supervisor Mark Ridley Thomas, the LA City Councilmember who represents this district, Marqueece Harris Dawson, is also supportive of the development and a Transportation Boarding School. Additional details on the suitability of the Vermont-Manchester site are in "Section 11: South LA Site Assessment."

[26] *Curto and Fryer. (2014, January). "The Potential of Urban Boarding Schools for the Poor: Evidence from SEED". The University of Chicago Press on behalf of the Society of Labor.*

SECTION 8: BOARDING SCHOOL MODEL

Overwhelming stakeholder support and institutional alignment make a Boarding School Model viable. This section explains the Boarding School Model in depth and provides essential programmatic recommendations that Metro should ensure are included in the model.

Boarding School Overview

The boarding school model features both an educational and a residential component and would be the first of its kind in LA County. Students live and attend school at a single campus where they have 24-hour access to essential services and support. The underlying assumption of the boarding school model is that putting students in a more stable environment will lead to increased academic achievement and positive life outcomes.

Industry Alignment: The boarding school model provides more time during the day to provide Industry learning, and the innovative nature of the model will likely attract partners.

Innovativeness: The urban public boarding school is a relatively new model in Los Angeles. Metro will be a leader in the field.

Impact: The residential aspect of this model increases positive impact as youth are provided free housing and wrap-around services that address barriers to education success. However, number of youth impacted is limited by enrollment capacity of the school.

School Culture: The immersive nature of the boarding school model promotes a strong sense of community among students and staff. Also, since the school will be built from the ground up, it is more likely that the school culture will align with Metro's vision.

Ease of Start-Up: Boarding Schools come with multiple additional regulatory requirements and certifications that are not required for traditional schools. However, given the tremendous need for educational and supportive services for Young Opportunity Youth, the authorization process for a Countywide Benefit Boarding Charter may be more straightforward.

Recruiting and Retaining Students: Recruiting and enrolling new students is difficult for any new school, and there is already notable enrollment competition and school saturation near the Vermont-Manchester site. Partnerships with County agencies and the ability to recruit students from across the County can improve enrollment if there is ample demand for the boarding school.

Scalability: The boarding school model is not easily scalable due to the high cost and space requirements. Even so, the housing needs in LA County may increase demand and therefore drive growth.

Sustainability: The biggest criticism and challenge of the boarding school model is its high cost. The cost is 2-3 times higher per student than a nonresidential school. Creative funding streams must be identified in order to make this model sustainable

Legal Structure: Countywide Benefit Charter

Metro needs a school design and structure that can realize the Transportation School vision and develop wall-to-wall Transportation-Aligned career academies. Furthermore, the school structure must be able to serve a diverse population of students that includes Young Opportunity Youth from across the County. Given these needs, the Boarding School should be a Countywide Benefit Charter. Countywide Benefit Charters serve a student population that cannot be served as well by a charter school that operates in only one school district in the County.[27]

Metro's vision for the Transportation School fits this description perfectly. A Countywide Benefit Charter will allow youth to attend the school from across the County and provide the school operator with the autonomy needed to innovate. They are also typically more easily authorized than a new charter school because they serve a specific need or have an innovative model that is not offered in other schools.

[27] *(Education Code (EC) 47605.6) (LACOE, "Overview of the Process for Considering a Petition to Establish a Countywide Charter."2016. Retrieved from: https://www.lacoe.edu/Portals/0/LACOE/CharterSchools/Overview_Initial%20Countywide%20Reqd%20Docs_3-25-16.pdf*

Boarding School Programmatic Recommendations

The County of Los Angeles issued a Request for Proposals (RFP) for a school operator and is currently reviewing proposals. Regardless of who is selected as the boarding school operator, in addition to the Signature Practices in Section 5 there are a few design elements that Metro should ensure are integrated into the final design of the school. Metro should reference these key design element recommendations when working with the school operator to develop the Transportation School.

WHAT – Key Boarding School Model Elements:

Hybrid Day and Boarding Model - The school model should be a hybrid model that includes a day school and residential component. By allowing a portion of the student population to live off campus, school enrollment may be easier to achieve and students who prefer to continue living with their families can still attend the school.

The school should provide 9-12th Grade and only include high school aged youth.

- Year One: Start with 9th grade, 125 kids, and four cohorts of 31
- Plan to serve youth slightly older than 18: Foster Youth and students who have struggled with homelessness or other adversity often fall behind in school and will need additional time to recover credits and graduate. The school should be prepared to accommodate youth who are 18-19 but still need additional time to fulfill their graduation requirements. The school should have a plan for supporting youth who cannot graduate by the time they are 20 years old.

Dual enrollment – Ensuring that 100% of students graduate with some college credits and that at least 25% graduate with an AA degree raises the school's profile and desirability for prospective students and donors. Develop articulation agreements with local community colleges that map to every career pathway.

Career Pathways – The school operator should select 3-4 career pathways and enroll every student into a career pathway by their sophomore year.

WHO is the Target Population

Coed – In order to maximize impact, the school should serve male and female students. During the teacher and student round table discussions, participants stressed the importance of boarding male and female students on separate floors. The school operator must also keep in mind that a significant portion of Young Opportunity Youth are LGBTQ. The school layout should allow for the equitable treatment and facilities for LGBTQ youth.

Reserve at least 30% of seats for Young Opportunity Youth – In order to uphold Metro's commitment to serve Young Opportunity Youth, the school operator should ensure that a minimum number of students are Young Opportunity Youth.

Reserve 20% of seats for youth from the local community – The school should reserve 20% of school positions each year for local students in order to holistically connect the school to the community and to ensure that the school benefits the local community.

HOW to Implement the Program

Cohort Model – Seasoned educators agree that grouping students into cohorts fosters stronger relationships between peers and creates a more personalized learning experience. When students are in cohorts they stay with the same group of students throughout their entire high school experience. They meet with their cohort regularly—sometimes every day for a few minutes or once a week for "homeroom." The school could launch its first year with four cohorts of 25 students.

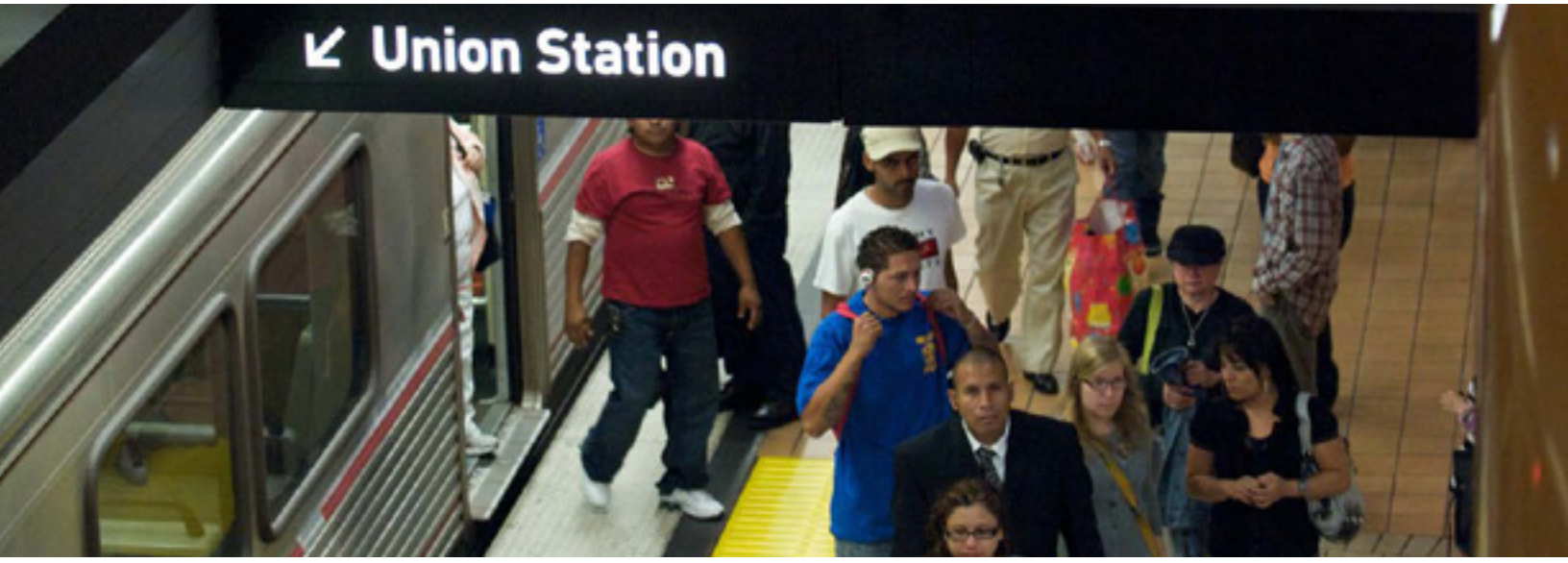
Flexible Block Schedule – The school needs a flexible schedule that allows for real world learning opportunities such as internships and apprenticeships. Block scheduling provides a minimum of two hours per class rather than the traditional 45-minute class period and is typically more conducive to an Industry-Aligned curriculum.

The school should consider reserving approximately 10% of seats for youth in unique circumstances in order to accommodate youth who want to enroll mid-year – The school's schedule must also be able to accommodate youth who enroll mid-year due to a change in their circumstances. Perhaps they were just released from a juvenile hall or suddenly became homeless. These students can transfer to the school mid-year, receive individualized remediation until the end of the quarter, and then fully incorporate into a cohort and the school schedule.

Vocational Training Center Access – The Vermont-Manchester mixed-use site includes a proposed transportation Vocational Training Center that can be used to train the community about the Transportation Industry and the job opportunities therein. Sharing a campus with the Vocational Training Center creates additional opportunities for students to receive industry-connected, hands-on training. At a minimum, the Vocational Training Center should be accessibly Monday through Friday for at least 3 hours per day to use as a component of the school program.

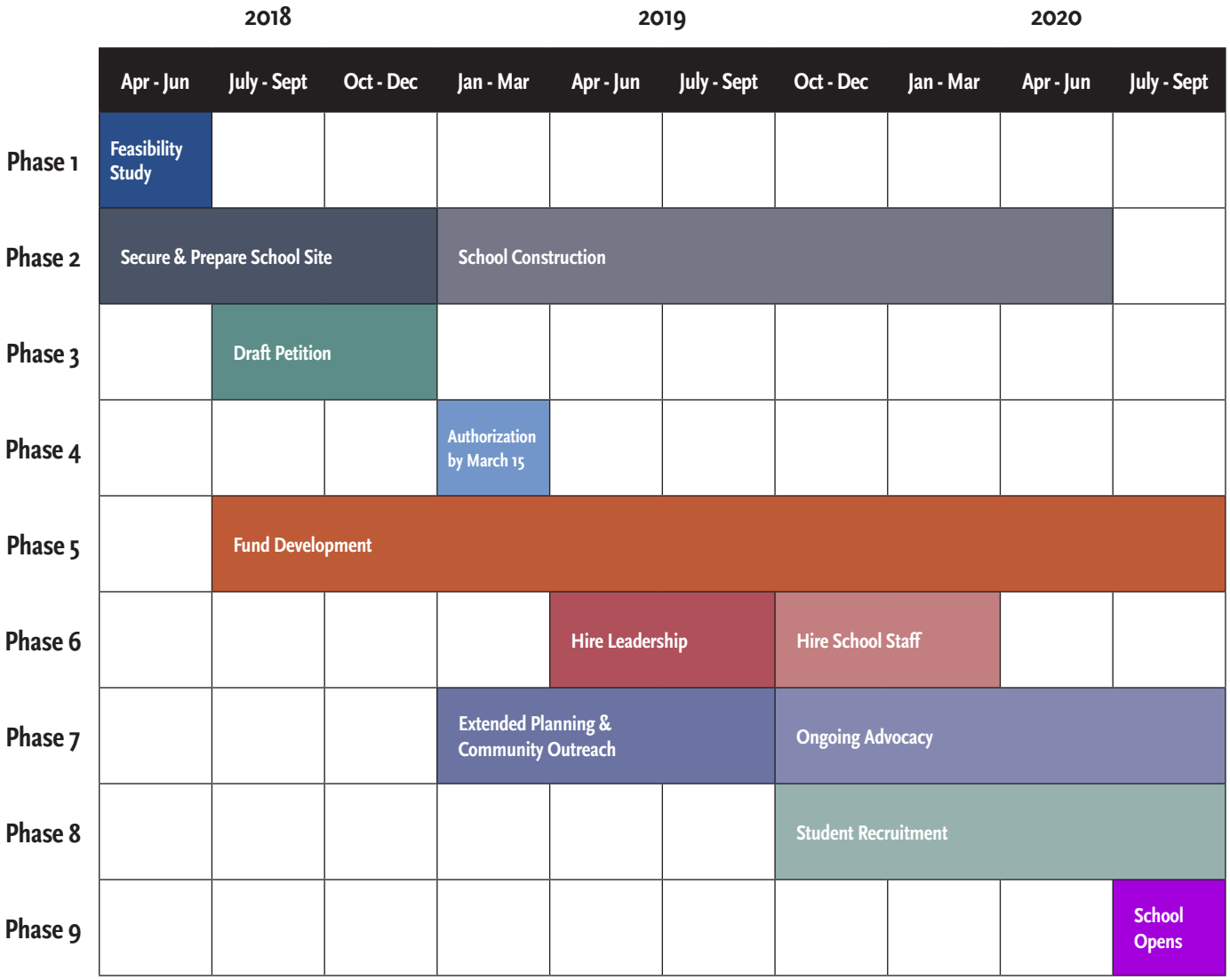
Safe Passage/Transportation Support – The school site is in a community that experiences violent crime and gang activity. The school should plan to provide transportation and safe-passage for students who need to travel for school-related activities such as internships.

Update curriculum every 2-3 years to ensure that it is still up-to-date with California and Industry standards. New technologies are continually changing how Transportation services are delivered. The schools curriculum needs to keep pace with innovation to ensure that graduates remain competitive when seeking employment.



SECTION 9: BOARDING SCHOOL OPERATION TIMELINE

This section describes the process for starting a new countywide benefit charter boarding school.



Start Up Time: 2+ Years

Phase 1: Feasibility Study. Research best practices, develop mission and vision, develop school philosophy and focus, assess what stakeholders are needed to succeed, and affirm Metro's commitment to supporting and leading the development of a Metro Transportation School.

Phase 2: Secure and prepare school site. Work with LA County to secure the necessary legal clearances and permits to build on the Vermont-Manchester site. Once school operator and developer are selected, collaborate to finalize the school design and stay abreast of the progress of the school construction.

Phase 3: Draft Countywide Benefit Charter Petition. Write the charter petition and establish a relationship with the authorizer. This phase culminates with the submission of the charter petition to the Los Angeles County Office of Education (LACOE). It is ideal to submit the petition in the Spring 1.5 years prior to the school's intended opening date.

Phase 4: Authorization. Continue community engagement and charter school authorizer outreach, prepare for and present at School Board meetings. The School Board must hold a public hearing within 30 days of charter school petition submission. The School Board must make a decision on whether or not to authorize the petition within 60 days of submission. This timeline can be extended for up to 30 days under mutual consent of charter school development team and School Board.[28] If LACOE denies the petition, the decision may be appealed to the state. Petitions should be approved in early February of the year prior to school opening to ensure timely release of funds. (Note: Petitions must be approved prior to March 15 of the year prior to when the school will open to qualify for Prop. 39 facilities funding)

Phase 5: Fund Development. Fundraising efforts should occur alongside the writing of the charter petition and remain ongoing even after the school's opening. Implement fundraising strategy. Prepare and submit grant applications to relevant government programs, and cultivate relationships with foundations, corporate philanthropy, and prospective individual donors.

Phase 6: Hire and Train School Leadership and Staff. Staff should be hired approximately 14 months to 1 year ahead of the school's opening date to ensure ample time for orientation and training. Staff will receive professional development on how to deliver Metro's specialized STEAM-centered, Transportation-Focused curricula and will be fully trained in how to work with Young Opportunity Youth using restorative justice practices and trauma-informed care. It is also important that all leadership and staff have a clear understanding of the school's mission and vision from the outset as this is a best practice that helps promote school success.

Phase 7: Community Engagement & Securing Stakeholder Buy-In. Community outreach efforts should begin as soon as possible in order to generate interest in the vision and mission of the school from the local community. While the school is being built and the leaders and staff are being trained, Metro should commence extended planning, stakeholder engagement, and advocacy activities as follows:

- Solicit community input for the design of Transportation School and the entire Vermont-Manchester site
- Build relationships with local institutions and politicians and advocate for legislation that will ensure success and sustainability of the school (dedicated public funds, etc.)
- Formalize community partnerships to provide wrap-around supports for students
- Formalize Industry and higher education partnerships to provide career pathways for students
- Identify core group of supporters who will support the charter authorization process (e.g. speak at Board Meetings and community forums, if needed)
- Work in partnership with school leadership, staff, and stakeholders to develop school curriculum and culture; establish a formal working group or planning committee for this purpose

Phase 8: Recruit and Enroll students. Begin targeted marketing campaign to raise the school's visibility and to recruit students at least 8 months before the school opens.

Phase 9: Open the School Using a Gradual Roll-Out Strategy. Start with one or two grade levels, then add an additional grade level every year.

[28] *State of CA, Education Code, Section 47605*

Timeline to Legally Operating the Boarding School

2018

JULY

School Operator Onboarding

Develop Joint Vision with School Operator & Execute MOU

AUGUST

Create Fund Development strategy

Begin Writing Countrywide Benefit Charter Petition

SEPTEMBER - DECEMBER

Community Stakeholder Meetings

Meet with Prospective Donors and Prepare Grant Applications

Solidfy Career Pathways and Partners

2019

JANUARY

School Construction Begins

MARCH

LACOE Authorization of Countrywide Benefit Charter

APRIL - SEPTEMBER

Secure Industry Partners

Develop Industry Partners

SEPTEMBER - DECEMBER

Hire School Leader

Launch Student Recruitment Efforts

Pathways, Curriculum and Articulation Working Groups

2020

JANUARY - JUNE

Expand Fundraising Efforts – Create Sponsorship Booklet

Hire School Staff

JUNE - AUGUST

Teachers & School Staff Professional Development

AUGUST

Ribbon Cutting Celebration with Families

SEPTEMBER

School Opens

SECTION 10: FUNDING THE TRANSPORTATION SCHOOL

This section describes the proposed cost of the Transportation School and strategies that can support school funding.

How do other Public Transportation Agencies Fund Transportation Schools?

As a founding Industry Partner, Metro should provide support to the school in a variety of ways. It is helpful to consider how other public transportation agencies support Transportation-aligned schools while determining how Metro can financially support a Transportation School in Los Angeles County. The best practices research uncovered a variety of Transportation Schools across the nation and a few overarching funding supports that the agencies provide to the schools.

Industry Financial Support Categories

Teacher Externships	The Port of Long Beach supports teachers' learning about the global logistics and trade industry by providing immersive educational experiences, fieldtrips, and externships for Long Beach teachers.
School Branding, Collateral & Promotional Supplies	Palmdale Aerospace Academy received donated aviation equipment through aviation Industry Partners. Port of Long Beach donated shipping containers to the Academy of Global Logistics to be used as hybrid classroom space and provides branded jackets to staff.
Project Management & Auxiliary Staff Time	Belkin and 72andSunny employ staff to support school partnerships and youth education.
Experiential Learning Supplies	NY MTA donated rail cars and buses to the Bronx Design and Construction Academy so students can learn to work on the vehicles in class.
Soft Costs	Every Industry Partner mentioned a variety of soft costs that they do not track but absolutely spend money to accomplish. Some of these items include: staff time, web design, graphic design, printing, and staff time spent volunteering.
Curriculum Development	IBM pays for P-Tech high school's curriculum development and updates it annually to ensure that it remains Industry-Aligned.
Facilities and Renovations	NY MTA plans to pay for a library revamp and facade beautification at Bronx Design and Construction Academy.
Paid Student Internships	NY MTA hires 25-30 student interns each summer and employs over 18 recent high school graduates from their partner school annually.
Scholarships	The Port of Long Beach provides scholarships to students.

There are a variety of existing transportation schools that work closely with public transportation agencies and Industry Partners. However, it was extremely difficult to identify how much each agency spends annually to support their school partners. Research reveals that once a public agency or corporation commits to supporting a school they either provide any and all support or they serve as sites for internship placements but do not provide support in many additional ways. Due to the wide variation in involvement, it is extremely difficult to identify a typical or average annual financial contribution that Industry Partners contribute to partner schools.

The most successful transportation school programs have one or more very engaged Industry Partners that provide a variety of support including: hard funding, in-kind funding, donations, staff time, etc. The range of industry financial support is anywhere from $60,000 to $800,000 per year in the most engaged cases.

The Unique Transportation School Budget

The unique Transportation-Industry aligned boarding school design requires innovative thinking about school budget design. The school budget must include the boarding of students, traditional school costs, state-of-the-art learning tools that facilitate Transportation Industry-Alignment, and wrap-around supports for Young Opportunity Youth.

The average per pupil costs at a Boarding School range from $14,000 to $85,000 annually. The table below shows a few examples of these costs.

Annual Per Pupil Costs for Various Boarding School Models

PROGRAM	ANNUAL COST PER PUPIL
National Guard Youth Challenge	$14,100 [29]
JobCorps	$22,290
YouthBuild	$13,000 - 24,000 [30]
SEED Boarding Schools	$40,000[31]
Milton Hershey School (boarding school for low-income youth)	$85,000[32]

It is anticipated that the Transportation School will cost approximately $35,000-$40,000 per pupil annually to operate. A detailed school budget is included in Appendix C.

[29] *Hollands. (2014). "Helping At-Risk Youth: Evaluation of the National Guard Youth ChalleNGe Program" Mathematica on behalf of the U.S. Department of Labor, Office of the Assistant Secretary for Policy, Chief Evaluation Office.*

[30] *Cohen and Piquero (2008, March). "Costs and Benefits of a Targeted Intervention Program for Youthful Offenders: The YouthBuild USA Offender Project." Developed for YouthBuild USA with funding from the Skoll Foundation.*

[31] *Curto and Fryer. (2014, January)."The Potential of Urban Boarding Schools for the Poor: Evidence from SEED". The University of Chicago Press on behalf of the Society of Labor.*

[32] *ABC webpage. Retrieved May 2018 from: http://www.abc27.com/news/institutions-that-work-milton-hershey-school_20180313093435310/1037197200*

Transportation-Aligned Costs in the Transportation School Budget

The fully loaded boarding school budget includes everything needed to operate the school. Not all of these costs, however, are essential to operating a Transportation Industry aligned school. This section outlines the Transportation-Aligned costs within the boarding school budget and provides a list of items and services that Metro and other Transportation Industry Partners could contribute to ensure that the school vision is supported. Fiscal support of any one or all of these line items will positively impact success of the Transportation School.

Transportation School Transportation-Aligned Budget Costs

		100 Students	400 Students
	Start-Up	Y1 Annual	Fully Implemented Annual
State of the Art Learning Tools			
State of the Art Pathway lab #1	200,000	-	20,000
State of the Art Pathway lab #2	200,000	-	20,000
State of the Art Pathway lab #3	200,000	-	20,000
1-to-1 Computers ($300 per chrome book)	-	37,500	120,000
Smart Classrooms	300,000	-	-
21st Century Software, Platforms and Subscriptions	-	60,000	180,000
Real World Learning			
Certifications + Pathway College Classes	10,000	10,000	50,000
Dual Enrollment Books and Materials	-	10,000	60,000
Setting up Articulation Agreements	50,000	-	-
Teacher and Staff Professional Development	-	30,000	70,000
Hands-on Learning Consumables	-	20,000	80,000
Field Trips/RWL Experiences ($200/student)	-	40,000	100,000
Transportation to and from Work Based Learning	-	43,200	129,600
Paid Internships/Earn and Learn	-	200,000	800,000
SUBTOTAL: Pathway Specific Expenses	**960,000**	**450,700**	**1,649,600**
Staff			
Transportation and Infrastructure CTE Coordinator	-	65,000	74,000
Global Trade and Logistics CTE Coordinator	-	65,000	74,000
Project Management and Business CTE Coordinator	-	65,000	74,000
Work-Based-Learning Coordinator	-	65,000	74,000
School to Career Counselor	-	65,000	65,000
SUBTOTAL: Certificated Personnel Expense	**-**	**325,000**	**361,000**
Fringe (32%)	**-**	**104,000**	**115,520**
SUBTOTAL: Certificated Personnel Expense	**-**	**429,000**	**476,520**
TOTAL TRANSPORTATION-ALIGNED	**$960,000**	**$879,700**	**$2,126,120**

Internal Metro Costs:

Metro will need to identify which line items of the above budget will be adopted as one-time vs. ongoing vs. excluded fiscal support for the Transportation School. In addition to adopted school-specific costs, Metro will incur additional internal costs due to contributed staff time spent volunteering, mentoring, and conducting real-world learning, as well as in-kind donations, branded materials, and staff time to collaborate with the school and implement other E3 Programming. Metro will also have to invest time and effort into fund development in order to sustain these efforts.

In addition to financial support committed to the Transportation School, Metro will independently fund and implement E3 supplemental programs. E3 curriculum and opportunities will be utilized throughout the community to broaden awareness of Transportation Industry opportunities.

Potential Funding Streams:

A Transportation Boarding School Model is relevant to a variety of different funding streams from the Public, Corporate, Foundation, and Philanthropy sectors. These Buckets of Potential Funding Streams include:

- Traditional K-12 Education
- Innovation in Education
- Career Technical Education (CTE) and Workforce Development
- Transportation Industry-Specific Funds
- Capital Costs
- Wrap-around Services
- Homeless Youth and Housing
- Foster Youth
- Justice-System-Involved Youth

Strategies for accessing these funding streams are included in Appendix D.

Funding Strategies:
Public Boarding Schools are expensive to run because traditional education funding does not support overnight boarding. Therefore, the school operator must identify long-term sustainable funding sources if the school is to survive and thrive because the boarding school cannot run based on grants and donations alone.

It is important to note that prior to the selection of a school operator and the specific career pathways that will be implemented at the school, funding strategies cannot be fully developed. Even so, the budget and buckets of expenses above provide a partial picture of funding needs.

Overall Funding Strategies

- Director and Manager should allocate time for donor cultivation and development
- A joint fundraising committee that includes the school operator, Metro, LA County Agencies, and other committed Industry Partners must be developed.

The strategies below describes the big picture options that can be utilized to access the funding needed to sustainably fund the school.

1. FOUNDATION: The school operator, LA County, Metro, and other relevant Industry Partners should collaborate to build relationships with and apply for major private foundation grants. Foundations want to be part of cross sector partnerships that bring the public and private sectors together to solve real world challenges. They also want to make sure that their money is strategically spent on initiatives that are sustainable and not dependent on grant support.

Steps to achieve this strategy:

a. Identify funding entity

i. i. Metro should create a 501(c)3 organization through which the E3 Initiative can fundraise in partnership with the WIN-LA Initiative. Funders may be more likely to contribute to a multi-generational regional approach to workforce development.

ii. Metro should also develop a partnership with the selected School Operator that will already have a 501(c)3 for Transportation School Specific funding needs.

b. Develop a Public-Private Partnership pitch and proposal with key stakeholders that can be shopped to key foundations and corporations.

c. Pitch key foundation stakeholders in personal meetings. Some of the most aligned foundations and their relevant funding interests include:

i. Conrad N. Hilton Foundation- Foster Youth and Housing

ii. Irvine Foundation- Better Careers and Linked Learning

iii. Walton Family Foundation- Novel school models, including those that have new approaches to college prep, career and technical education, and city-wide enrollment

iv. Weingart Foundation- Housing for homeless and low-income individuals, and cross sector collaborations

v. Eli and Edythe Broad Foundation: Innovation in Education that improves public schools.

vi. Bill and Melinda Gates Foundation: Improve U.S. high school and postsecondary education

vii. Jobs for the Future- Apprenticeship and career training

2. INDIVIDUAL DONORS: The funding collaborative should create a Transportation School sponsorship booklet and develop an individual donor outreach plan. Universities and Schools are typically supported through a mix of private investment, private donations, and government funding. This project will be especially appealing to individual donors who are interested in funding an innovative educational model.

Steps to achieve this strategy:

a. Reach out to program officers at the California Community Foundation (CCF) and others with Donor-Advised Funds and ask if they have any funders who may be interested in the project.

3. CORPORATE DONORS AND SPONSORSHIP: The funding collaborative should identify corporate partners that can contribute to the school in a meaningful way as part of their Corporate Social Responsibility efforts. Corporations are eager to fund and support schools that train youth for skills needed in their industries and prepares them for the work place.

Steps to achieve this strategy:

a. Metro participation in the fundraising strategy will be limited based upon the agency code of conduct and conflict of interest rule.

b. Identify the specific career pathways that will be implemented and solicit corporate sponsors for each. For example, UPS may be interested in partnering on a Global Trade and Logistics Pathway.

4. PUBLIC FUNDS: Access and braid public funds from City, County, State, and Federal sources to support the boarding school model. The vision of the Transportation School is to provide high-quality STEAM education and address the needs of Young Opportunity Youth including foster, homeless, and justice-system-involved youth. Given this mission, the school should identify public funds that can be used to provide school supports such as boarding, wrap-around services, etc.

Steps to achieve this strategy:

a. Speak to relevant LA County agencies to identify potential funding streams. There are a variety of potential agency funding sources that can be utilized to pay for portions of the boarding school program. Furthermore, there are a variety of population-specific dollars that can be accessed to support foster, homeless, and probation youth who attend the school. Some of these County Departments include: Department of Children and Family Services, Probation, Workforce Development, Aging and Community Services, Los Angeles County Office of Education, Department of Mental Health, LAHSA, and Office of Diversion and Reentry.

b. Work with relevant federal offices to identify funding streams. Some of the federal departments include: DOE, DOL, HHS, and OJJDP.

5. TRANSPORTATION-SPECIFIC WORKFORCE DEVELOPMENT FUNDS: Work with Metro's Finance Department to identify transportation-specific funding through the Department of Labor (DOL) and Department of Transportation (DOT) to support transportation workforce development, youth apprenticeship, and curriculum development.

6. POLICY: Advocate for policy reforms and new legislation to enable public funding allocation. The Transportation School model must identify sustainable funding streams that allow the school to focus on the provision of high quality, innovative education and not scramble for funding year after year. One strategy to do this is to advocate for policy reforms and new legislation.

Steps to achieve this strategy:

a. **Strategic Partnership**: Partner with a group home that provides Short-Term Residential Therapeutic Programs (STRTP) to Young Opportunity Youth and have those students attend the Boarding School Monday through Friday as a way to direct foster funds to the school and bypass AB403 (Continuum of Care Reform Legislation).

   i. Work with the nonprofit sustainability initiative to create strategic MOU between entities looking to braid funding and create a public private partnership.

b. **Create a STRTP group home on the top floor of the Boarding School that houses 50 youth**. At the new STRTP rate of $12,498 per child/month, this would increase funding to the Boarding school by $7,498,800/year if the beds are consistently filled. Youth residents could attend the Transportation School or other neighborhood schools and transition to the traditional Boarding School floors when prepared.

c. **Identify ways to access Measure H funding for homeless youth and unstably housed youth who choose to attend the school**. Measure H directed a significant amount of funding for homelessness and housing. Work with LA County Board of Supervisors to access some of these funds for the transportation school.

d. **Pass a local bond measure** that helps cover the gap subsidy.

7. OTHER:

a. **Rent out the unutilized floors of the Boarding School until the school is fully operational**. This can bring in hundreds of thousands of dollars in additional revenue.

SECTION 11

Los Angeles County successfully acquired a 4.2-acre property (175,170 square feet) at the intersection of Vermont Avenue and Manchester Boulevard in South Central Los Angeles through eminent domain. This site has experienced blight and neglect for over twenty years due to repeated development challenges and failure to start.

County Supervisor Mark Ridley Thomas is actively coordinating County resources to revitalize the community immediately surrounding the site. Los Angeles County plans to construct a mixed-use transit-oriented development that will include a transit plaza, affordable housing, a vocational training center, and other community-serving amenities such as a grocery store and small coffee shop.

By placing the Transportation School on this property, students will have direct access to these amenities and resources. While the Transportation School will be open to youth from across the County, Metro and LA County are committed to recruiting and encouraging local residents, especially Young Opportunity Youth, to enroll if they believe the school is a good fit for them.

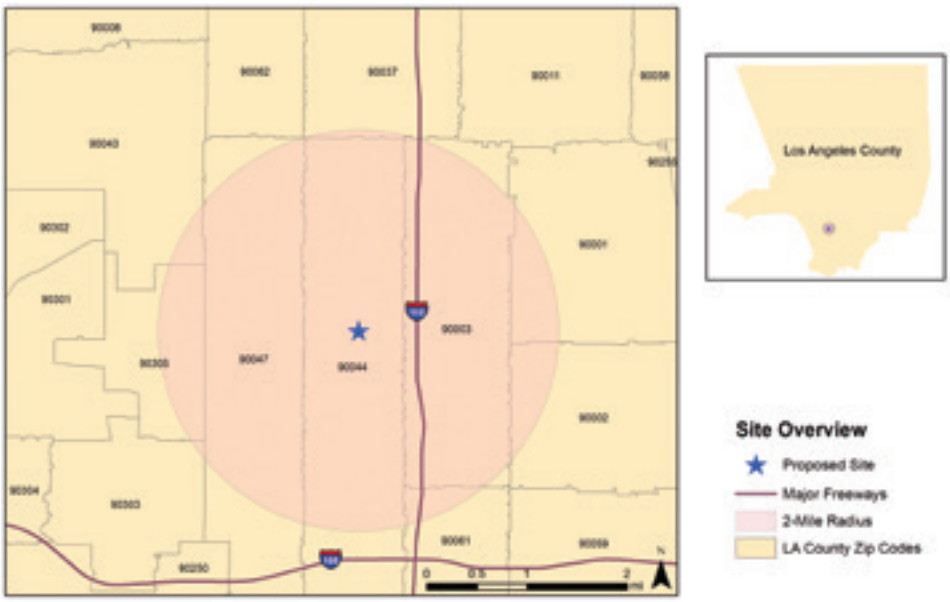
Typically, the most significant hurdle when building a new school is securing a site. LA County has eliminated this hurdle, allowing Metro to focus on the other components for the project. The physical location of a school greatly influences its long-term viability and capacity. Recognizing the critical importance of strategic site selection, a detailed site assessment was conducted in order to determine if the Vermont-Manchester site is a suitable location for the Metro Transportation School.

Overview of Assessment Methods:

Five key assessment criteria were used to evaluate the suitability of the Vermont-Manchester site to house the Metro Transportation School. These criteria are outlined in the table below. The 2-mile radius immediately surrounding the site and encompassing 3 key zip codes (90047, 90044, and 9003) was used as the assessment area. For each criterion, data was collected for the assessment area using a variety of sources and research methods. Data from the assessment area was then compared to South LA and LA County averages in order to elucidate key strengths, opportunities, and challenges associated with the Vermont-Manchester site.

KEY CRITERIA	ASSESSMENT METRICS
Capacity of the Physical Site	**1.1** Space—Adequate size/space **1.2** Accessibility **1.3** Safety **1.4** Scalability
Capacity to Serve Young Opportunity Youth	**2.1** Proportion of Young Opportunity Youth in the area **2.2** Proximity to Wrap-Around Services for Youth
Needs of the South LA Community Surrounding the Site	**3.1** Youth Population Trends **3.2** Existing Schools **3.3** Existing Career Education & Training Resources
Community Sentiment and Receptiveness	**4.1** Findings From South L.A. Community Surveys and Assessments **4.2** Public Comments at South LA Community Meetings
Proximity to Real-World Transportation-Industry Career Training & Experiences	**5.1** Proximity to Metro Hands-on Vocational Training Sites **5.2** Proximity to Other Transportation and Infrastructure Employers **5.3** Proximity to Higher Education and Transportation-Aligned Courses **5.4** Ability to Provide Career and College Advancement Opportunities

Vermont-Manchester School Site



Assessment Findings

CRITERION 1: Capacity of the Physical Site
The Vermont-Manchester site is located in the neighborhood of Vermont Knolls, in the heart of South L.A. The site is centrally located on a major transportation corridor and is part of a transit priority project. Given the location in an already-urban-developed area, the site has limited capacity to accommodate expansion of the Transportation School, should the need and desire arise to do so in the future. Even so, there are a variety of vacant lots in the surrounding area and across the County that can be used for this purpose.

It is important to note that the Vermont Knolls community experiences high levels of crime and gang activity; therefore, the school will have to take measures to ensure the safety of students.

CRITERION 2: Capacity to Serve Young Opportunity Youth
The Transportation School seeks to serve a diverse student population that includes Young Opportunity Youth and there is a high concentration of this population (and youth <18 in general) surrounding the Vermont-Manchester site. While the School will serve a diverse student population from across the County, it is valuable to have the school site situated in a community which many of the youth call home. Some statistics about the youth population of South LA are highlighted below.

Youth Population of South LA:

- **One of the highest youth population densities** in the County (Over 62,000 youth under 18 live near the site)
- **430 justice-system involved youth** live in the 3 zip codes surrounding the site
- **1,691 foster youth** live in group homes in the 8 zip codes surrounding the site
- **11% of the homeless population in South LA are youth under 18**
- **Teen motherhood is 2X more likely in South LA** than all other County areas
- **3.82%** of students in area schools are homeless and **1.94%** are foster youth, compared to County averages of 3.6% and 0.83%

No public boarding school currently exists in South LA; consequently, this school can serve a clear need represented in the statistics above. During round table sessions with educators and students, many expressed that they wished this model already existed at the site because it will be extremely valuable to the community.

It is important to note that should the school decide to serve a majority of youth from this community, the surrounding schools will lose enrollment numbers, possibly causing frustration from schools, local districts, and the Teachers Union. Due to this potential source of tension and the desire to serve youth from across the County, 20% of school enrollment should be reserved for local youth and 30% of seats should be held for Young Opportunity Youth. The rest of the seats should be filled through open enrollment with some capacity to serve mid-year enrollees.

Major Wrap-Around Service Providers Within 2 Miles of the Vermont-Manchester Site

Given the mission to serve a diverse student body that includes youth who need additional supports in order to thrive educationally, the school site must be located near direct service providers that have experience serving Young Opportunity Youth. Currently, there are multiple high quality wrap-around service providers immediately surrounding the site. These will ensure that the needs of Young Opportunity Youth can be served at the school.

Major Wrap-Around Service Providers Within 2 Miles of Vermont-Manchester Site

SERVICES DIRECTORY

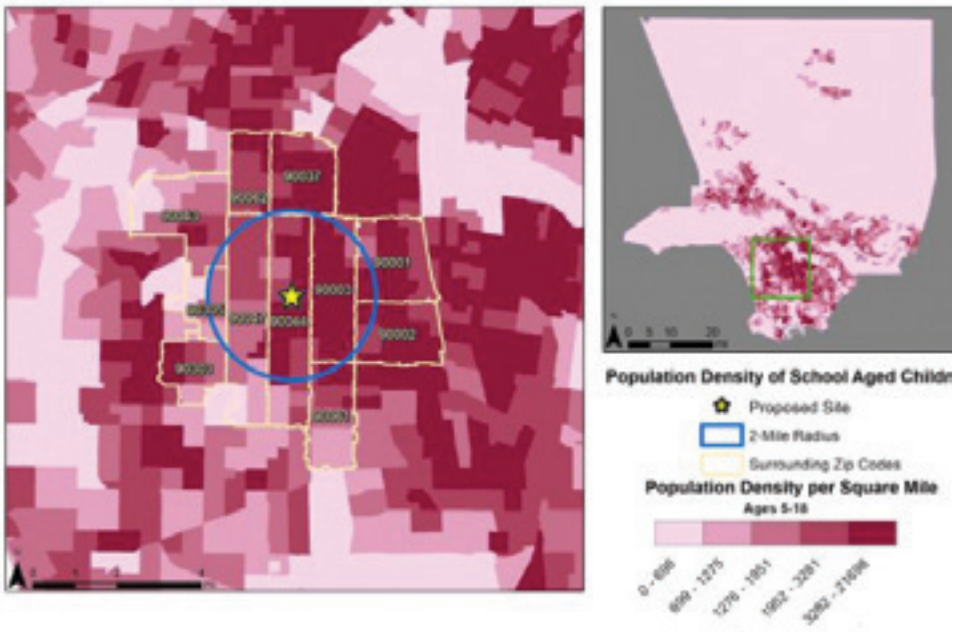
1. Children's Collective, Inc. (childcare)
2. Community Build Youth & Community Center (GRYD Prevention)
3. Chapter Two, Inc. (GRYD Prevention)
4. Vermont Village (GRYD Prevention)
5. The Children's Collective (FamilySource Center)
6. UMMA Community Clinic – Fremont Wellness Center
7. St. John's Well Child Center
8. Planned Parenthood – Dorothy Hecht Health Center
9. Los Angeles County DCFS (Department of Children and Family Services)
10. Legal Aid Foundation of Los Angeles
11. Community Centers, Inc. (Work Source Center)

★ Proposed Site
Childcare Services
Community & Youth Services
GYRD Gang Reduction Services
Health Services
Legal Aid & Social Services
Work & Employment Services
Major Freeways
Parks & Open Space
2-Mile Radius

CRITERION 3: Community Need

The ideal Metro Transportation School site should have demonstrable community need, with a dense population of school-age youth, a need for more public schools, and a lack of access to robust youth career education programming. South LA has one of the highest youth population densities of school age children in Los Angeles County. Over 62,000 youth under age 18 live near the site and represent over 30% of the population in the area.[33]

Population Density of School-Aged Children 5-18



A majority of these youth come from low-income, minority families who have historically been underserved.

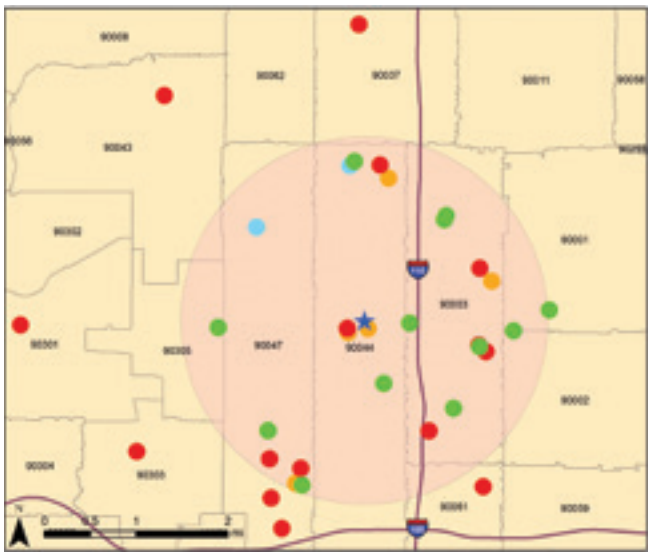
- **60%** of the population in the area surrounding the site is Latino, and **39%** is African American
- Average per capita income in 2016 in three zip codes immediately surrounding proposed school site was **$14,408** relative to LA County average per capita income of **$29,301**
- Median family income in 2016 was **$34,350** compared to **$57,952** in LA County
- **22.7%** of households received benefits from the Supplemental Nutrition Assistance Program (SNAP) in the last 12 months, relative to 9% of households in LA County as a whole
- Unemployment in the area surrounding the proposed school site was **12.8%** in 2016, compared to **8.9%** unemployment in LA County [34]

[33,34] *American Community Survey Data 2012-2016.*

Existing Schools
Poor student performance in many existing area schools indicates an opportunity to improve quality of education using an innovative Industry-Connected model. Furthermore, high enrollment at continuation schools in the area indicates an opportunity in terms of developing facilities designed specifically to meet the needs of Young Opportunity Youth to provide prevention, early intervention, and upward mobility.

The map below shows the schools immediately surrounding the site.

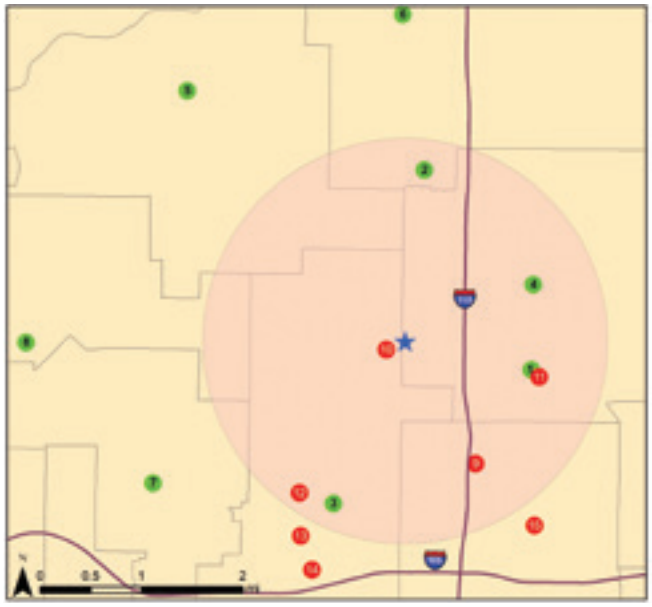
Schools Surrounding Vermont-Manchester Site



Total Schools Near Proposed Site

- Proposed Site
- Middle Schools
- High Schools
- Continuation Schools
- Combination Schools
- Major Freeways
- 2-Mile Radius
- LA County Zip Codes

Existing High Schools Near Vermont-Manchester Site



School Directory

1. Dymally High School
2. Augustus Hawkins High School
3. Washington Prepatory High School
4. John C. Fremont High School
5. Crenshaw High School
6. Manual Arts Senior High School
7. Morningside High School
8. Inglewood High School
9. Alliance Judy Ivie Burton Technology Academy
10. Alliance Piera Barbaglia Shaheen Health Services Academy
11. Pathways Community School
12. TEACH Tech Charter High School
13. Animo South Los Angeles Charter
14. Middle College High School
15. Alain LeRoy Locke College Preparatory Academy

High Schools Near Proposed Site

- Proposed Site
- Traditional Public High Schools
- Public Charter High Schools
- Major Freeways
- 2-Mile Radius
- LA County Zip Codes

CRITERION 4: Community Sentiment
Overall, the community is frustrated by the lack of development at the Vermont-Manchester site and wants development that will revitalize the local economy and community as soon as possible. The 2017 Community Coalition South LA People's Poll, the Urban Peace Institute's Community Violence & Needs Assessment and the Student Equity Need Index data show that there is strong community demand for additional housing, more youth development programming, upward mobility job opportunities, and increased safety in and around public schools.[35,36] Furthermore, youth expressed their concerns about safety issues ranging from gun violence, gang challenges, the presence of sex workers, and the fear of being solicited by a pimp.

Community Coalition's 2017 South Los Angeles People's Poll shows that there is a strong demand for better youth programming, community revitalization, diversionary restorative justice programs, and public housing in South LA.[37]

It is important to note that South LA residents have received very little information about the vision and plan for the Transportation School and have expressed a desire for public retail such as a grocery store and sit down restaurant. Therefore, it is essential to communicate with the public about the plans for the school and develop ways to engage to local community as soon as possible.

CRITERION 5: Transportation Industry Career & Training Experiences
In order for the Transportation School to provide Industry-Aligned education programming, it must be located in close proximity to industry stakeholders who can host field trips, provide internship placements, and offer other career exposure and work-based learning activities. The site should also be located close to Industry Employers who can provide entry-level job opportunities for graduates. The Vermont-Manchester mixed-use development will include a state-of-the-art Vocational Training Center that will be used for career trainings for the public. This facility will be directly next to the school and will be available for use by students at the school. In addition to the Vocational Training Center, the site is strategically located within close proximity to multiple post-secondary campuses with transportation programming including LATTC, USC, and LASC.

Conclusion:

Typically, the most significant hurdle when building a new school is securing a site. LA County has eliminated this hurdle, allowing Metro to focus on the other components for the project. The location of the Transportation School will be a key determinant of its long-term success and ability to achieve the ambitious mission of this project.

[35] *"Student Equity Need Index." Advancement Project California Educational Equity. http://advancementprojectca.org/campaign-tools/maps-and-data/student-equity-need-index.*

[36] *Urban Peace Institute. "Community Violence & Needs Assessment – Harvard Park, South Los Angeles." Page 25. 2017. https://static1.squarespace.com/static/55b673c0e4b0cf84699bdffb/t/5a21da7ce4966b16a494b55f/1512168062873/HP+Assessment+Report_2017.pdf*

[37] *Community Coalition, 2017 South Los Angeles People's Poll*

SECTION 12: SUPPLEMENTAL E3 PROGRAMMING

A first-of-its-kind Transportation School that prepares youth for college and career pathways into the Global Transportation Industry will support transportation employers in meeting their workforce needs. However, the scale of the skilled workforce shortage calls for a comprehensive and large-scale intervention. Once it is fully operational, approximately 100 students will graduate from the Transportation School each year. And while 100 career-ready graduates—many of whom will immediately join the workforce—is an impressive accomplishment, it is still a drop in the bucket when compared to the 778,000 new jobs that Measure M funds are expected to generate in Los Angeles County and the hundreds of thousands of positions nationally.

Additional programs, referred to here as "Supplemental E3 Programs," are needed in order to expand Metro's impact across the County by exposing, educating, and eventually, employing more youth. For example, E3 programming could include an expanded industry fieldtrip program, a hands-on workshop, or employee mentorship to name a few. These programs will be developed and sustained by Metro and will support efforts to keep the transportation-skill workforce shortage from becoming a crisis. Once developed, E3 Supplemental Programs will provide support to the Transportation School in addition to other youth across the County.

Potential E3 Supplemental Programs

PROGRAM IDEA	DESCRIPTION
EXPOSE – Programs that raise students' awareness and interest in the global Transportation Industry	
1: Online Hub of Resources (similar to academy.polb.com)	Develop a website that helps students, educators, and parents learn about careers in the global Transportation Industry. It would provide descriptions of various career pathways, guidance on how to prepare for certain jobs, and links to relevant programs and resources such as scholarships, summer programs, and internship opportunities.
2: Two-Hour Intro to Transportation Careers offered across LA County	Develop an engaging workshop that sparks students' interest in the Transportation Industry. The workshop would demystify the Transportation Industry and show the broad array of opportunities available at Metro and in the larger industry. Metro could prioritize offering the workshop at juvenile halls and at wrap-around services sites' in order to reach more Young Opportunity Youth.
3 Metro Field Trip/Tours Program	Update Metro Community Education Department's existing tours programs so that it provides all middle school students in LA County with at least one transportation exposure field trip. The current Rail Safety Orientation Tour covers safety protocols; a section on career opportunities could be added to the program.
4: Metro Employee Mentors	Partner with Big Brothers Big Sisters, SparkLA, and/or Youth Mentoring Connection to match Metro employees with student mentees. These organizations can bring students to Metro headquarters to meet with their mentors, which helps the students get a realistic glimpse of the Transportation Industry and builds a positive relationship with their mentors.
5: Toolkit for Metro Employees to Deliver Presentations on Transportation Careers	Develop a user-friendly toolkit that Metro employees can use to deliver presentations on transportation-related careers at their children's schools, alma maters, local churches, and/or community centers. Employees are often the best spokespeople because they can speak from their own experience about the benefits of working in transportation.

PROGRAM IDEA	DESCRIPTION
EDUCATE – Programs that teach students transportation-aligned content and skills	
1: Regional Transportation Education Center/ Expanded Museum	Create an interactive regional transportation education center that teaches the community and students about the Transportation Industry and the complex issues surrounding the region's transportation infrastructure. The Center engages them to be active participants in potential solutions (like a science museum or children's museum).
2: Transportation Summer Camp	Create a summer program that introduces students to the Global Transportation Industry. Partner with local community colleges and/or universities to serve as host sites and organize 1-4 week-long sessions - include a residential option if possible.
3 Transportation Competition for School Teams	Metro would create a scenario, invite students to submit entries describing their response to the challenge in the scenario, and select a winner. Prizes such as trophies, scholarships, and or equipment for the school could be offered. The Mineta institute in San Jose conducts a similar competition focused on environmental sustainability.
4: Curriculum for Middle School	Create a transportation-focused curriculum that aligns with middle school standards. Provide training and professional development for the teachers who implement the curriculum in their classrooms.
5: Curriculum for Probation Residential Centers during Winter Semester	Create a Transportation-Focused Curriculum tailored to the needs of youth in Probation residential centers. Provide training and professional development for the teachers who implement the curriculum.
6: Mobile Education Program	Retrofit a Metro bus and fill it with equipment and materials that a classroom can use for transportation-focused activities. Partner with schools to create a schedule of classes offered on the Metro Mobile Education Bus.
7: Fellowship for Teachers	Create a fellowship program for teachers to learn about the Global Transportation Industry, include guest speakers, tours, and sample lesson plans they can be implement in their classrooms.
8: Transportation Learning Resource Library for Teachers	Create a resource library that teachers in LA County can use to check out materials such as robotics kits, propulsion science projects, and other resources that are costly to purchase but best utilized in a library format.

PROGRAM IDEA	DESCRIPTION
EMPLOY - Job opportunities that support students' growth in a transportation career pathway	
1: Expand Metro TCAP Program	Expand the number of students participating in Metro's Transportation Career Academy Program (TCAP) by adding more employers, offering high school internships during the school year, and/or shortening the length of the summer internship so that two cohorts can participate each summer.
2: Youth Apprentice-ships with Registered Apprenticeship (RA) Certification	Create a youth apprenticeship program for high school juniors and seniors that complies with federal guidelines for Registered Apprenticeships (RA).
3: Create Social Enterprise Program for Youth	Support students in creating their own transportation-related business or product. Provide classes on business plans, marketing, and customer service. Some of the services that students could offer are routine repairs to cars or equipment, mobile apps, and/or design support.

Many of these Supplemental E3 Programs—such as mentoring and providing registered apprenticeships—are essential components of the Transportation School learning experience. Students need hands-on Industry experiences that reinforce and enhance the instruction they receive in their classrooms.

We need to WIDEN students' understanding of employment in the Global Transportation Industry!

Throughout the course of this feasibility study, Metro employees repeatedly confirmed that they did not learn about Transportation-Related careers until they became adults. 69% of Metro employees are over 40 years old; many of these employees have worked at Metro for 10 or more years, but a vast majority of them worked in other industries before making the switch to transportation. Young people need the Transportation Industry demystified earlier in their educational experience in order to reverse these trends. Some members of the Metro Transportation School Working Group suggest offering E3 Supplemental Programming as early as elementary school.

The Transportation School may in fact struggle to enroll students if the public's perception of the Transportation Industry does not evolve. Supplemental E3 Programs can expand the Transportation School's network of supporters and help create excitement in the community. Ideally students who participate in exposure activities such as attending a tour at a Metro Division will want to attend the Transportation School when they are in high school so that they can deepen their interest and knowledge about the Industry.

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Most Popular Supplemental E3 Program Ideas

Teachers, students, Metro employees, and Metro Transportation School Working Group members all provided feedback on the Supplemental E3 Program ideas in the table above. **Field Trips** and **Mentorships** often emerged as the most highly ranked ideas in the "Expose" category. A **Transportation Camp** was the most highly ranked idea in the "Educate" category. And **Offering Youth Apprenticeships** was the most highly ranked idea in the "Employ" category.

Recommendations:

Launch Supplemental E3 Programming with Field Trips Program
Metro's Community Education Department currently offers a Rail Safety Orientation Tour (RSOT) and an Online Fieldtrip Program to schools that are within ½ mile of the rail lines. RSOT content is primarily focused on teaching rail safety practices. These programs could be updated and relaunched as Transportation Industry Exposure Fieldtrips that cover the variety of careers in the Transportation Industry (as well as safety practices).

Fieldtrips are excellent opportunities to embed hands-on learning into existing course work. If expanded, current or former Metro interns who participated in Metro's Transportation Career Academy Program (TCAP) could serve as tour guides and conduct community outreach to publicize the program. This gives interns the opportunity to develop their public speaking and presentation skills while students participating on the tour get to hear a young person's perspective about what it is like to work at Metro. Furthermore, an expanded fieldtrip program takes advantage of the wealth of interesting locations and practical real-world learning applications that are available in Metro's existing infrastructure.

Develop Formally Registered Metro Youth Apprenticeship
Youth apprenticeship is an "earn-while-you-learn" model that includes extensive on-the-job and classroom-based training. Students enter the program once they are 16 years old and in their last two years of high school, and spend a few days a week working under the supervision of an industry employer. When apprentices are not working, they attend high school classes as usual as well as classes at a partnering educational institution (usually a community college) and enroll in courses that are related to what they are learning on the job. After high school graduation, participants in the registered youth apprenticeship can move into full time employment or into an adult registered apprenticeship with a partnering organization. By the end of the program, apprentices accumulate years of work experience, college credit, and a relevant Industry credential.

A Youth Apprenticeship program would add extreme value to the Transportation School and provide a pipeline of students to enroll in the program. In turn, students would earn Industry credentials, earn wages, and have a resume of work experience should they choose to go down a different path. Metro should work with community college partners to identify a few non-traditional areas for which they can develop a formally registered apprenticeship. For example, Metro may develop an Urban Planning, Communications, or Project Management apprenticeship. Metro should reach out to the California Department of Industrial Relations and the US Department of Labor to solicit recommendations and assistance. Both departments can provide meaningful and important insights in developing the foundation of the program. Furthermore, there is a huge federal and state push to expand apprenticeships and multiple new funding streams to support this expansion.

E3 Supplemental Programming for Juvenile Justice System-Involved Youth

Given the vision to serve a diverse student body at the Transportation School, Metro should invest in programs that increase Young Opportunity Youth's exposure to the Transportation Industry. The LA County Probation Department currently operates 10 juvenile camps and 3 juvenile halls across the County. Approximately 1,000 incarcerated and at-risk youth depend on LACOE to provide specialized instruction and educational services each day in juvenile halls and probation camps. Youth typically stay in the camps for 3-12 months. There are a variety of ways that Metro can achieve the mission to expose, educate, and employ youth into the Transportation Industry through the probation camps and halls. Some potential models are highlighted below:

1. **Winter Semester Transportation School Curriculum:** Winter semester in the camp schools is only a month long. Metro could develop an intensive CTE and common-core-aligned curriculum that provides a detailed introduction to the Transportation Industry for youth. This would also be an excellent marketing and outreach strategy for the Transportation School in the community as participants learn about the school and may decide to enroll. Another option would be to provide a supplemental extracurricular class in addition to the traditional school day.

2. **Juvenile Hall Exposure Class:** The average length of stay in a hall is 13-14 days. It is very difficult for LACOE to provide meaningful educational services in this short span of time. Metro could develop curriculum that is deliverable in a 2 to 3 day format to introduce and excite youth about opportunities in the Transportation Industry and potentially get them eager to enroll in the Metro Transportation School.

The E3 Supplemental Programs described in this section are far from supplemental; they are essential to the success of the Transportation School and a crucial support that will keep the the skilled transportation workforce shortage from becoming a crisis.

E3 Supplemental Programming Timeline

2018

JULY

- Gather input from Internal Metro Working Group
- Re-Design Field Trips Program

AUGUST

- Launch Updated Field Trips Program Pilot
- Research Registered Youth Apprenticeship Certification Process

SEPTEMBER - DECEMBER

- Implement & Evaluate Field Trips Program Pilot
- Develop Partnership with LAUSD, LA County Probation Dept. & LACOE to offer Intro to Transportation-Workshops
- Continue Registered Youth Apprenticeship Research

2019

JANUARY - FEBRUARY

Update & Enhance Field Trips Program

MARCH - JULY

Curriculum Development for School Workshops

Curriculum Development for Juvenile Camps & Halls Programming "

AUGUST - DECEMBER

Implement Juvenile Camps & Halls Program Pilots

Begin Youth Apprenticeship Certification Process

2020

JANUARY - JUNE

Evaluate Intro to Transportation Workshops and Juvenile Camps & Halls Programs

Update & Enhance Evaluated Programs"

Complete Youth Apprenticeship Certification Process

JUNE - AUGUST

Integrate E3 Programming into Transportation School's Teachers & School Staff PD

AUGUST

Integrate E3 Programming into Transportation School's Teachers & School Staff PD

SECTION 13: INTERNAL METRO SUPPORT AND HUMAN CAPITAL NEEDED TO IMPLEMENT

The vision of the E3 Initiative is to develop multiple educational programs that expose, educate, and employ youth into the Transportation Industry. This initiative needs a specific home within Metro that ensures the initiative is developed holistically and not piecemeal throughout Metro's various departments. The hiring of an E3 Director and Transportation School Manager demonstrates Metro's commitment to developing the necessary internal structures that prepare the organization to implement programs, manage partnerships, involve staff, and support the school. Some of the additional infrastructure needs include:

Develop internal employee engagement policies that allow staff to participate in E3 programming. Employees can serve as mentors, speak at schools, and manage interns. These activities take time and must be built into employee expectations and job responsibilities if they are to be sustainable. Therefore, Metro must develop mechanisms that facilitate clear communications with staff and ways for staff to sign up for these E3 employee engagement opportunities.

Identify and/or create entry-level positions for high school graduates. Metro already identified Industry-Wide hard-to-fill positions and determined the essential job skills needed to become employed in those jobs. Furthermore, Metro is in the process of reviewing all of the minimum qualifications for every job within the organization to ensure that there are entry-level positions available. These efforts must also identify and/or create job opportunities for 18 year olds with a high school diploma.

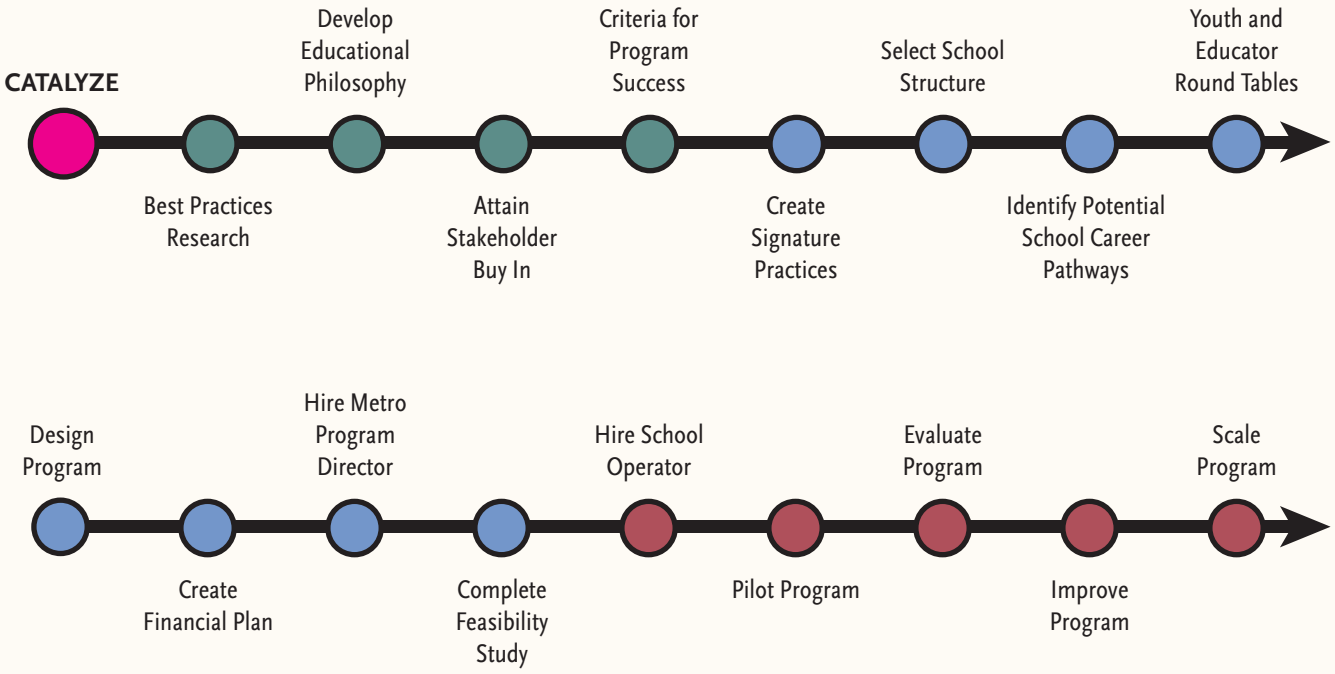
These internal agency processes and structures are essential to the successful implementation and long-term sustainability of the E3 Initiative.

SECTION 14: PROCESS

Educational initiatives of this size and scope are rarely initiated by a public agency and almost never maintained by a public agency. Consequently, Metro is closely tracking the process of developing the E3 Initiative to develop a road map in the event other agencies wish to follow Metro's lead.

The chart below shows the steps Metro took to conduct this feasibility study and the steps Metro will take to implement and scale the E3 Initiative.

E3 Initiative Design Phases



APPENDICES

TYPES OF CAREER READINESS PROGRAMS

PROGRAM TYPE	CAREER EDUCATION IN SCHOOLS			POST SECONDARY			APPRENTICESHIP		
	CAREER ACADEMY	CAREER TECHNICAL EDUCATION (CTE)	LINKED LEARNING	DUAL ENROLLMENT	VOCATIONAL/TRADE SCHOOL	INTERNSHIPS	YOUTH APPRENTICESHIP	PRE-APPRENTICESHIP	REGISTERED APPRENTICESHIP
DEFINITION	Stand-alone school or program within a school that builds its academic program around specific career fields	School-based program that combines rigorous academic content with occupational skills training	Program within a school that integrates rigorous academics with CTE and on-the-job training	Students are enrolled in high school and college simultaneously by linking college credits to high school curricula	School in which students learn how to do a job that requires specialized skills	Employer led outreach and placement of youth into on-the-job training and learning opportunities	Apprenticeship program that starts while youth are high school students that typically fast tracks them into longer apprenticeships	Prepares individuals to enter a partnered Registered Apprenticeship (RA). Completion of the program ensures placement into RA	A job in which an individual is paid to learn a set of skills through on-the-job training.
TYPICAL AGE GROUP SERVED	High school	7th grade through high school	Pre-K through high school	High school and higher education	Higher education/ GED+	High school and higher education	High school students age 16+	High school students age 16+ & anyone interested in being an apprentice	Anyone age 16+ (18+ for hazardous occupations)
MANDATORY PROGRAM ELEMENTS	Must follow CDE sector standards, align with CDE academic requirements, and hire CTE-licensed teachers to be an official CTE school		Same as CTE + Include on-the-job training	College partner and School must strategically link class units earned, A-G aligned courses	Bureau for Private Postsecondary Ed. (CA Dept. of Consumer Affairs) monitors. Must be compliant with CA Ed. Code and CA Code of Regulations. CDE can accredit	Internship must contribute to student learning and must not just help employer.(Comply with legal internship rules)	Same requirements as apprenticeship. *California does not yet have a structure to register or regulate youth apprenticeship programs. *States can create these	Department of Labor (DOL) Federal Apprenticeship Standards. Approved training curriculum based on industry standards. Must be connected to a RA. *No Requirements in CA.	Register with the Department of Labor (DOL) and comply with Federal Apprenticeship Standards (1-6 years a, at least 144 hours of classroom instruction, and on the job training annually)
CERTIFICATES/ CREDENTIALS POSSIBLE?	Yes, if coursework aligns with industry-based certificates and examinations			Yes, AA or BA (IGETCE (GE transfer courses)	Yes, if coursework aligns with industry-based certificates and examinations or is connected to a RA.		Yes. Youth apprentices obtain a portable industry credential and may receive a free AA Degree	Could align with an industry certificate.	Yes. Participants receive industry credentials

	POTENTIAL METRO TRANSPORTATION SCHOOL CAREER PATHWAYS						
	ENGINEERING	**CONSTRUCTION AND TRADES / INFASTRUCTURE**	**MECHANICS AND OPERATIONS** (bus & rail operators, mechanics, etc.)	**GLOBAL TRADE/LOGISTICS/ SUPPLY CHAIN MANAGEMENT**	**BUSINESS OPERATIONS** (Marketing, Human Resources, Finance, Audit, Accounting, Budgeting, etc.)	**CIVICS & PUBLIC POLICY** (Urban Planning, Law, Community Relations, Real Estate, Communications)	**SAFETY (Security/Police)**
Relevant Metro Department(s)	Program Management	Building Services & Program Management (Construction Management)	Operations	Vendor Contract Management & Operations	Administration Skills across many departments - portable skills	Planning, Government Relations, Real Estate, Communications	Systems Security & Law Enforcement
Entry Level Jobs at Metro	Drafting Technician; Environmental Specialist; Third Party Administrator; Engineer	Plumber; Locksmith; A/C Tech; Painter	Service Attendant; Bus Operator; Bus Mechanic C; Electronic Communication Technician; Systems Electronic Communication Technician	**Store Keeper**	**Administrative Aide; Administrative Analyst; Customer Care Representative; Accounting Clerk; Accountant**	**Communications Coordinator for Community Relations; Legal Secretary; Transportation Planner**	**Transit Security Officer I**
Core Competencies	Computer-Aided Drafting (CAD), blueprint reading, technical report writing	Vehicle operation; building code and plan reading; irrigation systems; blueprint reading; lock types; key-cutting machine training; air conditioning, fan, heater, exhaust blower, refrigerator, freezer repair and maintenance; painting methods	**Service Attendant:** Fuel, clean, & check tire pressure, record activities in Maintenance Management Material (M3) System **Bus Operator:** Memorize routes, complete inspections & safety checks, collect fares, receive & transmit 2-way radio messages, write reports **Bus Mechanic C:** Use hoists, lifts and dollies, maintenance of diesel or gasoline engines, electrical, fueling & other systems, shop math, computerised management systems **Elec Comm Tech**: DC, AC, semiconductor devices & AM-FM radio theory, installation, maintainance & repairs of two-way radio, headsign, public address, digital video, and silent alarm systems on Metro vehicles, repair circuit boards **System Elec Comm Tech:** Installation & maintainance of advanced transmission and switching systems within buildings	Warehousing and inventory control practices, safety procedures, basic arithmetic, vehicle operations and safety, familiarity with parts, tools, and equipment used in a bus, rail, or automotive repair shop, use Microsoft Windows-based computerized program as inventory control system, operate forklift to move, load, and unload materials, & respond to inquiries	Bookkeeping, office administration, project management, note-taking, event planning, public speaking, customer serivce, filing & records management, facilitating meetings	GIS, oral and written communication skills, research and report writing, policy analysis, land use planning and regulations, public finance, transportation policies, real estate leasing and development practices, compile and analyze datas, use statistical research and mathematical processes, public speaking, event planning	Patrol building, direct visitors, address safety problems, monitor security camera systems, record daily activities in log, & conduct fare inspection
Certifications	**Environmental Specialist:** Bachelor's degrees **Engineer & Third Party Administrator:** Professional Engineer License issued by CA Board for Professional Engineers, Land Surveyors, and Geologists - *desireable, not required*	None listed	**Service Attendant:** None **Bus Operator:** BP Permit & BP License before end of training **Bus Mechanic C:** Must be able to obtain a Class A-P permit or AP drivers license, have full ASE (H) Series Transit Certifications in H1-CNG, H3-Drive Train, H4-Brakes, H5-Suspension/Steering, H6-Electrical/Electronics *desirable* **Elec Comm Tech:** General Radio/Telephone Operators License issued by FCC **System Elec Comm Tech:** General Radio/Telephone Operators License issued by FCC, Certification in network cabling and/or network systems (LAN/WAN) *desirable*	Forklift certification/license	**Administrative Aide:** Associate's degree - Business, Public Administration, or other related field **Administrative Analyst:** Bachelor's degree - Business, Public Administration, or other related field OR Associate's degree in a related field and 4 years' experience performing basic or entry-level budgeting and administrative work **Customer Care Representative:** None **Accounting Clerk:** Associate's degree in Accounting *desirable, but not required* **Accountant:** Bachelor's degree - Accounting or related field	**Communications Coordinator for Community Relations:** Associate's degree in a related field **Legal Secretary:** Associate's degree - Office Administration or related field **Transportation Planner:** Bachelor's degree - Urban or Transportation Planning, Engineering (Civil, Transportation, Structural, Industrial, Mechanical, Architecture, etc), Business, Public Administration, Political Science, Urban Design, Public Policy, Economics, or other related field	High School Diploma or GED and must be able to obtain a California Guard Card issued by the Department of Consumer Affairs within 6 months of hire date
Minimum Qualifications	**Drafting Technician:** 2 years' experience using AutoCAD **Environmental Specialist:** 1 year experience in compliance or environmental monitoring **Third Party Administrator:** 2 years' experience or may be substituted for education **Engineer:** 4 years experience performing engineering work in appropriate discipline	**All** require CA Class C driver's License & 4 years' full-time experience OR successful completion of departmental Personnel Qualification Standards for their respective role	**All** require CA Class C driver's License **Service Attendant:** High school diploma or GED & 2 years' full-time experience performing vehicle servicing OR 1 year completion of automotive-related study at an accredited college program **Bus Operator:** 21 or older, 6 months customer service experience, H-6 DMV printout w/ 2 years of clear driving record, BP Permit **Bus Mechanic C:** 2 years' experience heavy equipment or automotive OR completion of 2-year, full-time training program from an accredited trade school; OR 1 year work full time vocational (30 semester units) and 1 year experience as a heavy equipment or automotive mechanic **Elec Comm Tech:** 2 years at accredited trade school or college OR 3 years' work experience **System Elec Comm Tech:** 4 years' journey-level experience & up to 2 years' full-time training in DC, AC, semiconductor devices, AM/FM radio theory, advanced communications, and digital electronics at accredited trade school or apprenticeship program	2 years' experience in a lead capacity performing stock, warehouse, or inventory control work in a computerized/automated environment, experience must include operation of a forklift	**Administrative Aide:** 2 years' experience performing administrative or secretarial work **Administrative Analyst:** 2 years' experience performing basic or entry-level budgeting and administrative work **Customer Care Representative:** 1 year of experience performing clerical office duties and providing customer service duties in person or over the telephone, ability to speak a language other than English may be required for some positions **Accounting Clerk:** 6 months of experience performing clerical accounting duties in the areas of Payroll, Accounts Receivable, Accounts Payable, or Credit and Collections **Accountant:** 2 years' professional-level accounting experience including using accounting software	**Communications Coordinator for Community Relations:** 2 years' experience performing paraprofessional marketing, public relations, promotions, or other related work OR Bachelor's degree in a related field, CA Class C driver license **Legal Secretary:** 2 years' experience performing legal secretarial work **Transportation Planner:** 1 years' experience in public transportation or financial planning; OR Master's degree in a related field may substitute for 1 year of the required experience	Will require CA Class C driver's License 2 21 or older, 6 months of experience as a security guard *preferred,* *u* ncorrected vision: no more than 20/70 in both eyes; normal color vision
Curriculum to tie into	Project Lead The Way (PLTW) https://www.pltw.org/	Multi-Craft Core Curriculum (MC3) through LA/OC Building & Construction Trades Council https://nabtu.personalearning.com/	Work with NATEF and ASE to provide curriculum that is certified http://www.automechanicsschools.com/natef.html	UCLA Extension has a global trade program: http://business.uclaextension.edu/international-trade-and-commerce/	IAAP (International Association of Administrative Professionals)'s Certified Administrative Professional certificate http://www.iaap-hq.org/page/certification	Action Civics LA https://www.mikvachallenge.org/action-civics-la/ YPAR (Youth-led Participatory Action Research) yparhub.berkeley.edu/	LAPD Cadet Program https://www.lapdcadets.com/

APPENDIX C

METRO TRANSPORTATION SCHOOL BUDGET					
	125 students	225 Students	325 Students	400 Students	400 Students
	Year 1	Year 2	Year 3	Year 4	Year 5
REVENUE	125	225	325	400	400
STATE FUNDING					
Per Pupil LCFF + EPA ($12952/student if 97% high needs)	1,619,000	2,914,200	4,209,400	5,180,800	5,180,800
Facilities Allowance ($1117/student per SB740)	139,625	251,325	363,025	446,800	446,800
Public Charter Schools Grant Program Planning and Implementation Grant (2017-18 amounts)	500,000				
Child Nutrition Reimbursement (State) (2018-19 rates) ($5.86/student*200 days)	146,500	263,700	380,900	468,800	468,800
Title 1	-	239,400	359,100	418,950	418,950
Other Income		-	-	-	-
TOTAL REVENUES	2,405,125	3,668,625	5,312,425	6,515,350	6,515,350
EXPENSES					
State of the Art Learning Tools					
State of the Art Pathway lab #1	-	20,000	20,000	20,000	20,000
State of the Art Pathway lab #2	-	20,000	20,000	20,000	20,000
State of the Art Pathway lab #3	-	20,000	20,000	20,000	20,000
1-to-1 Computers ($300 per chrome book)	37,500	67,500	97,500	120,000	120,000
Smart Classrooms	-	-	-		50,000
21st Century Software, Platforms and Subscriptions	60,000	120,000	180,000	180,000	180,000
Real World Learning	-	-	-	-	-
RWL Transportation Curriculum Upkeep	10,000	10,000	10,000	10,000	10,000
Certifications + Pathway College Classes	10,000	30,000	50,000	50,000	50,000
Teacher and Staff Professional Development	30,000	50,000	70,000	70,000	70,000
Hands-on Learning Consumables	20,000	40,000	60,000	80,000	80,000
Field Trips/RWL Experiences ($200/student)	40,000	60,000	95,000	100,000	120,000
Transportation to and from Work Based Learning	43,200	86,400	129,600	129,600	129,600
Paid Internships/Earn and Learn	200,000	400,000	600,000	800,000	800,000
Subtotal: Pathway Specific Expenses	450,700	923,900	1,352,100	1,599,600	1,669,600
Salaries					
Principal/Executive Salary (with 5% annual increase)	130,000	136,500	143,325	150,491	158,015
Assistant Principal Salary (with 5% annual increase)	100,000	105,000	110,250	115,762.50	121,551
Certificated Teachers Salaries ($65,000/teacher and 1 teacher/20 students)	390,000	734,500	1,076,725	1,353,836	1,421,528
Certificated Special Education Salaries	130,000	195,000	260,000	325,000	325,000
Transportation and Infrastructure CTE Coordinator	65,000	65,000	71,000	74,000	77,000
Global Trade and Logistics CTE Coordinator	65,000	65,000	71,000	74,000	77,000
Project Management and Business CTE Coordinator	65,000	65,000	71,000	74,000	77,000
Work-Based-Learning Coordinator	65,000	68,000	71,000	74,000	77,000
Wrap Around Service Coordinator	83,000	83,000	83,000	83,000	83,000
School to Career Counselor	65,000	65,000	65,000	65,000	65,000
LCSW Licensed Clinical Social Worker	108,000	108,000	216,000	216,000	216,000
Subtotal: Certificated Personnel Expense	1,266,000	1,690,000	2,238,300	2,605,090	2,698,094
Teacher Aides/Assistants Salaries (1@ 40,000 per 30 Students)	160,000	280,000	440,000	520,000	520,000
Before/After Care Salaries (1 FTE ($55K)/25 Students)	275,000	495,000	715,000	880,000	880,000
Technology Professional	65,000	65,000	130,000	130,000	130,000
Clerical Salaries (55,000 per FTE)	55,000	110,000	165,000	220,000	220,000
Sr. General Maintenance Worker	85,000	85,000	170,000	170,000	170,000
Cook ($32,000 each 1/40 students)	96,000	192,000	256,000	320,000	320,000
Custodial Salaries (55,000 per FTE)	110,000	110,000	165,000	220,000	220,000
Contracted Staff	50,000	100,000	100,000	100,000	100,000
Subtotal: Classified Personnel Expense	896,000	1,437,000	2,141,000	2,560,000	2,560,000
Total subtotal all salaries	2,162,000	3,127,000	4,379,300	5,165,090	5,258,094
Fringe (32%)	691,840	1,000,640	1,401,376	1,652,829	1,682,590
TOTAL PERSONNEL	2,853,840	4,127,640	5,780,676	6,817,918	6,940,684
Books and Supplies					
Textbooks and Core Curricula Materials	8,000	15,000	20,000	25,000	30,000
Books and Other Reference Materials	20,000	75,000	100,000	125,000	150,000
Consumable Materials + School Supplies	37,500	45,000	67,500	67,500	67,500
Dual Enrollment Books and Materials	5,000	10,000	25,000	60,000	60,000
Other Student/Classroom Support Materials	15,000	30,000	50,000	50,000	50,000
Non-Capitolized Equipment (not incl. 1-1 computers)	25,000	25,000	50,000	50,000	50,000
Software	70,000	150,000	225,000	225,000	225,000
Contracted Student Services (SPED; Substitute Teachers)	50,000	136,350	208,616	246,954	250,595
Miscellaneous Student Expense	15,000	30,000	45,000	45,000	45,000
Subtotal: Direct Student Expense	245,500	516,350	791,116	894,454	928,095
Occupancy Expenses					
Rent (165,165 sq feet*$4/sq foot)	660,660	660,660	660,660	660,660	660,660
Building Maintenance and Repairs	40,000	80,000	100,000	100,000	100,000
Utilities	200,000	200,000	200,000	200,000	200,000
Janitorial Supplies	25,000	50,000	75,000	100,000	100,000
Subtotal: Occupancy Expenses	925,660	990,660	1,035,660	1,060,660	1,060,660
Administrative Expenses					
Office Supplies and Materials	50,000	50,000	70,000	70,000	70,000
Travel and Confereces	15,000	30,000	60,000	60,000	60,000
Office Equipment Rental and Maintenance	20,000	40,000	80,000	80,000	80,000
Telephone/Telecommunications	10,000	15,000	15,000	15,000	15,000
Insurance	80,000	100,000	120,000	120,000	120,000
Legal, Accounting and Payroll Services	30,000	50,000	70,000	70,000	70,000
Printing and Copying	10,000	10,000	15,000	20,000	20,000
Postage and Shipping	8,000	10,000	12,000	14,000	14,000
Consulting, Oversight and Management Fees	400,000	700,000	1,000,000	1,300,000	1,300,000
Subtotal: Office Expenses	623,000	1,005,000	1,442,000	1,749,000	1,749,000
General Expenses					
Food Service	312,500	562,500	812,500	1,000,000	1,000,000
Toilitries, feminine hygiene products, and Basic Needs ($25/month per student or $300/student annually)	37,500	67,500	97,500	120,000	120,000
Miscellaneous Wrap-Around Needs	25,000	50,000	75,000	100,000	100,000
Subtotal: General Expenses	375,000	680,000	985,000	1,220,000	1,220,000
TOTAL EXPENSES	5,473,700	8,243,550	11,386,552	13,341,632	13,568,039
TOTAL REVENUES	2,405,125	3,668,625	5,312,425	6,515,350	6,515,350
FUNDING GAP	3,068,575	4,574,925	6,074,127	6,826,282	7,052,689
Cost per pupil (Total Expense divided by # enrolled)	**43,789.60**	**36,638.00**	**35,035.54**	**33,354.08**	**33,920.10**

NOTE: Construction costs will be somewhere between $50-$150 Million and are not included in this budget

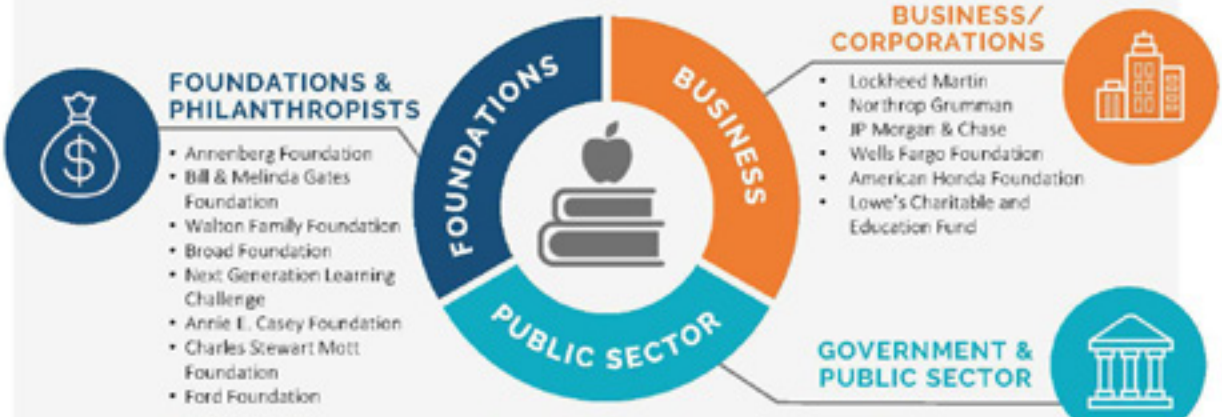
APPENDIX D

Funding Strategy

K-12 EDUCATION

K-12 Education funding is support in majority part by the State Funds (60%), with local taxes (25%) and federal funds (10%) also playing a large role. In addition to government funding, numerous foundations have a history of supporting K-12 education. The Metro Transportation School should create a diversified strategy, maximizing potential state allocations, leveraging facilities funding, and targeting foundations with funding strategies aligned to STEAM, Special Populations, and Career Pathways.

MAJOR FUNDING STREAMS



FOUNDATIONS & PHILANTHROPISTS

- Annenberg Foundation
- Bill & Melinda Gates Foundation
- Walton Family Foundation
- Broad Foundation
- Next Generation Learning Challenge
- Annie E. Casey Foundation
- Charles Stewart Mott Foundation
- Ford Foundation

BUSINESS/ CORPORATIONS

- Lockheed Martin
- Northrop Grumman
- JP Morgan & Chase
- Wells Fargo Foundation
- American Honda Foundation
- Lowe's Charitable and Education Fund

GOVERNMENT & PUBLIC SECTOR

US Government

- Office of Innovation and Improvement grants
- USDOE: Title I Funding; Title II Funding

State of California

- Local Control Funding Formula (LCFF) Base Grant
- SB74- Rent and Lease Expenditures Reimbursements

Los Angeles

- LACOE discretionary funds
- Board of Supervisors Discretionary Funds

NOTEWORTHY PUBLIC POLICY

- District and public charter schools receive 20% additional "Supplemental Funding" per student for students with higher needs – learning English, in poverty, and/or in foster care.
- LCFF Concentration funding supports Districts and Public Charter Schools with more money if 55% of children in the district are in poverty, in foster care, or learning English. (Most money when 97% of students are low-income)
- Early College legislation supports additional time for students to earn an AA through dual enrollment
- Dual enrollment legislation supports free college classes for HS students
- California Career Pathways Trust provides funding to motivate the development of sustained kindergarten through grade fourteen (K–14) career pathways programs in order to better prepare students for the 21st century workplace.

FUNDING STRATEGIES

- The Metro Transportation School seeks to serve low-income and foster youth, and will benefit from LCFF funding strategies if the school meets important targets
- Career Pathway grants are very popular and will likely see continued funding. School pathways should align to currently supported pathways in order to maximize funding.
- SB 740 allows schools to receive rent and lease expenditures reimbursements up to 75% of annual facilities rent and lease costs or $1117 per pupil. If the school operator has a nonprofit entity, it can rent from the entity to cover these lease costs and turn an expense into income.

Funding Strategy

K-12 EDUCATION

INNOVATION IN EDUCATION

There are longstanding efforts to foster innovation in the education sector. These initiatives seek to teach students real world skills with hands-on application, identify innovative ways to integrate technology into daily learning, support educator's ability to teach creatively, and design school facilities that facilitate implementation of these strategies. The transportation School is an innovative model that should tap into these funding streams.

Overarching: Department of Education- Office of Innovation and Improvement

STEM/STEAM: Lockheed Martin; Northrop Grumman Foundation; National Science Foundation STEM+ C; HP Catalyst Grant; Verizon Innovative Learning CSR Campaign

Professional Development: USDE Title II; California State Educator Effectiveness Grant; Next Generation Learning Challenge; Toshiba America Foundation

Facilities: USDOE: 21st Century Community Learning Centers

Career Pathways: California Career Pathways Trust provides funding to motivate the development of sustained kindergarten through grade fourteen (K–14) career pathways programs in order to better prepare students for the 21st century workplace.

Other Foundations of Note:

- Bill & Melinda Gates Foundation
- Walton Family Foundation
- John D. & Catherine T. MacArthur Foundation
- Next Generation Learning Challenge
- Lumina Foundation for Education
- Robertson Foundation
- William & Flora Hewlett Foundation
- Broad Foundation

Funding Strategy

CAPITAL COSTS

Capital Costs are the one-time, "start-up" costs that must be invested in order to acquire essential assets. For a school, this includes facilities, infrastructure, and nonconsumable supplies like desks, chairs and textbooks. Because the Metro Transportation School is being built from the ground up, the most expensive capital cost will be the cost of constructing facilities, including the school facility, the boarding facility, specialized career education labs, and indoor/outdoor recreation spaces. Technology infrastructure, including computers, software, and internet connectivity will be another major area of capital investment. Luckily, there are a number of funding streams available to fund initial capital costs.

MAJOR FUNDING STREAMS

NOTEWORTHY PUBLIC POLICY

- **Prop 39 Charter School Facilities Program.** State law passed in 2000. Requires school districts to make "reasonably equivalent" facilities available to charter schools upon request.
- **Proposition 51 CTE Facilities Program**--Proposition 51 includes $500 million to construct/modernize CTE facilities as well as purchase equipment on comprehensive high school sites. Must match funding.
- **Senate Bill 740 (SB 740)** State legislation passed in 2001. Established the Charter School Facility Grant Program, which provides annual assistance with facilities rent and lease expenditures to charter schools that meet eligibility criteria.

FUNDING STRATEGIES

Although public funding is available for charter schools, especially those which are new/starting up, it is important to **utilize a diverse array of funding sources** in case public funding is delayed or fails to come through. Many private financing companies exist who specialize in lending to charter schools, and bonds and loans are among the most common forms of working capital used to cover facilities costs. Although interest-bearing loans and financing are not ideal, they are common funding mechanisms for new schools.

Funding Strategy

CAREER TECHNICAL EDUCATION

The California Department of Education defines Career Technical Education as "A program of study that involves a multiyear sequence of courses that integrates core academic knowledge with technical and occupational knowledge to provide students with a pathway to postsecondary education and careers." By providing industry-aligned skills and credentials, the Metro Transportation School could qualify for CTE-specific funding.

MAJOR FUNDING STREAMS

US Government
- Carl D. Perkins Act
- DOL Apprenticeship Accelerator Program
- DOT Workforce Development

State of California
- Specialized Secondary Programs
- CTE Incentive Grant (CTEIG)
- Watch new AB 1743

Los Angeles
- Strong Workforce funds (state funding) dispersed **through local Community Colleges**
- WDACS workforce development
- rough local Community Colleges

NOTEWORTHY PUBLIC POLICY

- **CA Community Colleges Strong Workforce Program** – The Governor's 2018-19 Proposed Budget allotted $212 million for high school CTE programs to be included in the CCC Chancellor's Office Strong Workforce Program
- **Career Technical Education Incentive Grant** — Competitive grant that awards schools up to $750,000 and scheduled to end in 2019; local districts are lobbying State to renew it.
- **Specialized Secondary Programs** – State funding for specialized high schools that provide advanced training in high-tech fields. Very difficult to get this funding, roughly half of funding goes to two high schools.

FUNDING STRATEGIES

- **Dual Enrollment with Community Colleges** – Establishes partnerships with community colleges early in order to be more competitive for funding. This unlocks Strong Workforce funding and builds credibility with prospective donors.
- **Educate donors on the diversity of careers in transportation** – The state organizes CTE programs into 15 Industry Sectors. Although Transportation is a CTE Sector, the pathways included within it do not fully represent all the disciplines that transportation touches (such as Engineering, and Building & Construction trades)
- **Apprenticeship**- The Federal government is trying to expand apprenticeship opportunities and has expanded funding

Funding Strategy

TRANSPORTATION WORKFORCE DEVELOPMENT

The Transportation School may be eligible for funds provide by federal and state agencies. The following funding opportunities support transportation-specific workforce development efforts including apprenticeships, curriculum development, summer enrichment, and testing the feasibility of new and innovative projects.

US DEPARTMENT OF TRANSPORTATION FUNDING

Section 5204(e) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) allows funds to be used for workforce development activities, including pipeline programs that help students prepare for transportation careers.

Garrett A. Morgan Technology and Transportation Education Program – Designed to improve the preparation of students, particularly women and minorities, in science, technology, engineering, and mathematics (STEM) and to connect them to careers in the transportation industry. During 2006-2009, DOT allotted approximately $1.25 million each fiscal year to the program. The program is also part of SAFETEA-LU.

USDOT Section 5307, 5337, and 5339 Formula Grants – Metro receives approximately $250 million from these funding streams and ½ of one percent of these grants can be used for workforce development efforts (approximately $1.25 million). However, 20% of the total funding for a workforce development project must come from non-USDOT sources (e.g. Department of Labor or Education).

USDOT Section 5314 Innovative Public Transportation Frontline Workforce Development Program – Competitive grant program for projects that improve and expand transportation workforce development and training, including establishing apprenticeships and creating partnerships with high schools, community colleges, and other community organizations.

Section 504(e) of Title 23, U.S.C., Surface Transportation Workforce Development, Training, and Education under the **Fixing America's Surface Transportation Act (FAST Act)** allows core formula apportioned program funds to be used for workforce development, training, and education efforts, including activities intended to develop interest and promote participation in surface transportation careers.

National Summer Transportation Institute (NSTI) – Funds summer camps for middle and high school students to explore careers in transportation. College campuses across the country host the camps. Cal State LA and Cal Poly Pomona are NSTI host sites. Metro could partner with another college partner to establish another NSTI camp.

Public Transportation Innovation Section 5312 – Funds research and projects that create solutions for problems facing transit agencies. Projects tend to be for new products or efficiency models. However, funding is for testing the feasibility of "new and innovative concepts" for advancing transit; the Transportation School can be interpreted as an innovate concept worth studying and testing.

CALIFORNIA FUNDING

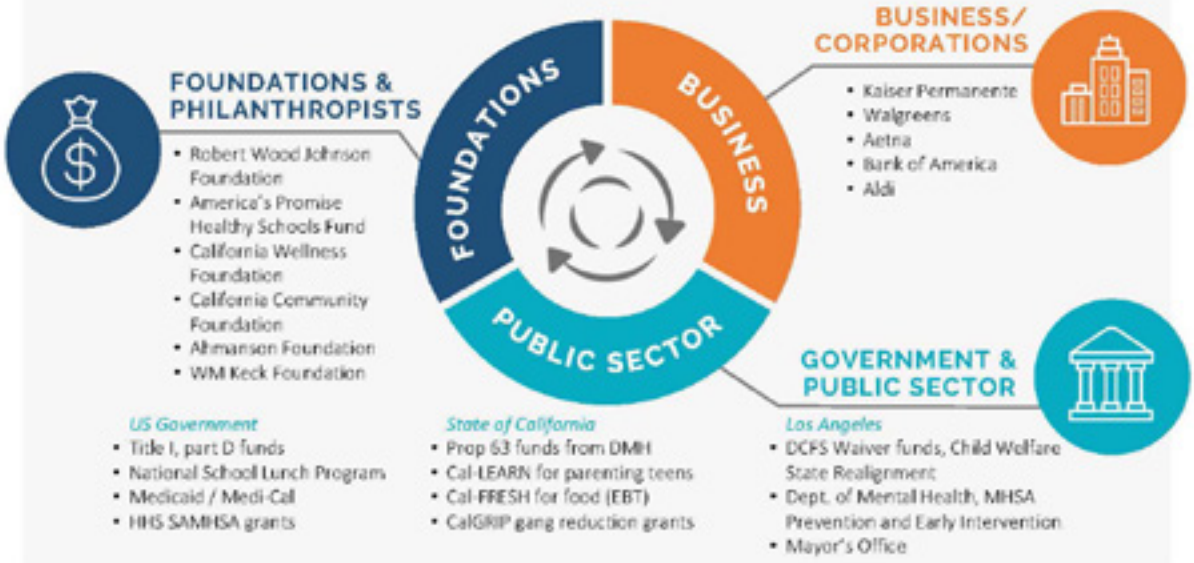
Senate Bill (SB) 1 – The California legislature enacted SB 1, also known as the Road Repair and Accountability Act in April 2017. The new legislation increased funding for transportation through tax and fee rate increases. From 2017 through 2022 approximately $5 million will be appropriated annually to the California Workforce Development Board to create pre-apprenticeship training programs that will support projects funded by SB1.

Funding Strategy

WRAPAROUND SERVICES

Wraparound Services are coordinated support services that address barriers to educational success including basic needs, mental health, etc. Common wraparound services include physical and mental health services, substance abuse treatment, food security and nutrition programs, housing assistance, transportation, childcare students served by the Metro Transportation School will require well-coordinated, comprehensive wraparound support in order to graduate from the program and pursue careers in the field.

MAJOR FUNDING STREAMS



NOTEWORTHY PUBLIC POLICY

- **SB 163.** State legislation passed in 1997. Authorized counties to use foster care funds in a flexible manner to provide Wraparound Services to youth. Administered via California Department of Social Services (CDSS)
- **Mental Health Services Act (Prop 63).** State legislation passed in 2004. Provides increased funding, personnel, and resources to support county mental health programs. 1% income tax on personal income in excess of $1 million.
- **Katie A. landmark case.** The Katie A. settlement agreement in 2003 required the County and DCFS to improve mental health services and placement stability for children in the department's custody.

FUNDING STRATEGIES

- **Access individual funds.** In the state of California, many individual public assistance funds exist for high-need youth, but these funds are often underutilized. Maximizing use of existing public assistance funds through dedicated case management is a key strategy for ensuring financial sustainability of the Transportation School.
- **Partner with county agencies.** Leverage partnerships to access additional public funding.
- **Secure grant funding.** Work with community partners to secure grant funding for wraparound services not covered by public funding and to fund programs featuring new/innovative service delivery models

Funding Strategy

FOSTER YOUTH

Foster Youth are a key demographic who will be served by the Metro Transportation School. Foster youth are children whose parents cannot take care of them and whose need for care has come to the attention of child welfare agency staff. In LA County, there were 20,821 youth in foster care in 2015. Foster youth are at increased risk of experiencing poor life outcomes, including low educational attainment, poverty, homelessness, justice system involvement, substance abuse, and poor physical and mental health. A number of public and private funding streams exist to combat this disparity and improve life outcomes for foster youth.

MAJOR FUNDING STREAMS

FOUNDATIONS & PHILANTHROPISTS

- Annie E. Casey Foundation
- Conrad N. Hilton Foundation
- Aspen Institute—Opportunity Youth Incentive Fund
- Anthony and Jeanne Pritzker Family Foundation
- Edna McConnell Clark Foundation

BUSINESS/ CORPORATIONS

- JP Morgan Chase
- Bank of America
- Wells Fargo
- Starbucks
- Los Angeles Chargers
- Gap, Inc.

GOVERNMENT & PUBLIC SECTOR

US Government
- Chafee Education & Training Vouchers (ETV)
- Social Security Act Title IV-E

State of California
- LCFF Allocation via CDE
- Foster Youth Services (FYS) funds via CDE
- AB 403 Continuum of Care

Los Angeles
- County Office of Child Protection (OCP) discretionary funding
- DCFS Waiver funds

NOTEWORTHY PUBLIC POLICY

- **Foster Care Independence Act.** Federal legislation passed in 1999. Created the Chafee Foster Care Independence Program, which authorizes funding to help youth make a successful transition to adulthood ($140 million in FY2017)
- **Family First Prevention Services Act.** Federal legislation passed in 2018. Major reform to current child welfare system. Under the new law, the federal government will offer unprecedented support for keeping families together.
- **California Fostering Connections to Success Act (AB 12).** Passed in 2012. Extended age of foster care from 18 to 21
- **Continuum of Care Reform (AB 403).** State act passed in 2015. Will phase out group homes in favor of foster families. Defines strict guidelines for which residential settings eligible for funding. Boarding School does not fit.

FUNDING STRATEGIES

- **Advocate now.** Major federal reforms for child welfare funding are currently underway. Metro should advocate for boarding schools as a prevention in order to access new pots of money made available through the Family First Act.
- **Partner with a group home** to provide support to youth with higher needs on one floor of the the Boarding School and collect the STRTP rate of $12,498/child per month to support the educational model.
- **Utilize individual ETV.** Chafee training vouchers (called the California Chafee Grant for Foster Youth) give each foster youth aged 16-18 up to $5,000 a year for career technical training at the postsecondary level. Partner with community colleges to access these funds.

Funding Strategy

HOMELESS YOUTH AND HOUSING

Homeless youth are a key demographic that will be served by the Metro Transportation School. The U.S. Department of Education defines homeless youth as youth who "lack a fixed, regular, and nighttime residence" or an "individual who has a primary nighttime residence that is a supervised or publicly operated shelter." There are over 6,000 unsheltered homeless youth in LA County today, and the number has been consistently increasing from year to year. A number of public and private funding streams have emerged to address the growing crisis of youth homelessness in the region, some of which are highlighted below.

MAJOR FUNDING STREAMS

FOUNDATIONS & PHILANTHROPISTS

- Conrad L. Hilton Foundation
- Weingart Foundation
- Ahmanson Foundation
- Argoll Foundation
- Rose Hills Foundation
- Mark S. Taper Foundation
- Ralph M. Parsons Foundation
- Raikes Foundation
- WM Keck Foundation
- Melville Charitable Trust

BUSINESS/ CORPORATIONS

- Kaiser Permanente
- Salesforce
- Airbnb
- Disney VoluntEars Community Fund
- LA Clippers Foundation

GOVERNMENT & PUBLIC SECTOR

US Government
- Title I Allocation
- McKinney-Vento Funds
- HUD Youth Homeless Demonstration Program Grant

State of California
- HCD Grants (CDBG-Community Development Block Grant)

Los Angeles
- Prop HHH funds
- Measure H funds
- City CDBG
- HCIDLA

NOTEWORTHY PUBLIC POLICY

- **McKinney-Vento Act.** Federal legislation which protects the rights of homeless students and allocates funding for homeless youth education and supportive services. Administered by USDOE and USHUD.
- **Runaway and Homeless Youth Act (RHYA).** Federal act administered by the US HHS's Family and Youth Services Bureau (FYSB). The program funds street outreach, short-term shelter, and longer-term transitional living and maternity group home programs that serve and protect homeless youth.
- [Upcoming] **California Senate Bill 918, Homeless Youth Act of 2018**

FUNDING STRATEGIES

- The majority of funding for homeless youth housing and education comes from federal sources (ED, HHS, and HUD); it is important to have a solid understanding of existing funding streams and how to effectively access them. One way to do this is by establishing a working relationship with the State Coordinator for homeless education. This post is currently held by Ms. Leanne Wheeler—lwheeler@cde.ca.gov | (916) 319-0383
- Many private foundations and philanthropists are interested in combatting youth homelessness, especially in LA, which has one of the highest numbers of homeless youth in the nation.
- CA Department of Housing and Community Development has $560 million to allocate to homelessness spending.

Funding Strategy

JUSTICE SYSTEM-INVOLVED YOUTH

Youth who are involved in the juvenile justice system and/or who are on probation are a key demographic who will be served by the Metro Transportation School. Los Angeles County is known for having the largest juvenile justice system in the country, which includes about 1,000 youth in juvenile detention facilities and about 9,000 youth in the community. In recent years, significant reforms have been made to the juvenile justice system at the state and local levels, with increasing emphasis on diversion programs and youth development as alternatives to incarceration. This push for reform has given way to increased public and private funding for the development of innovative program models serving justice-involved youth.

MAJOR FUNDING STREAMS

NOTEWORTHY PUBLIC POLICY

- **Juvenile Justice and Delinquency Prevention Act (JJDPA).** Federal legislation first enacted in 1974. A primary channel through which the federal government provides juvenile justice funding to states; $283 million in FY2018
- **Juvenile Justice Crime Prevention Act (JJCPA).** State legislation passed in 2000. Allocates approx. $31 million to LA County per year for programs aimed at youth crime prevention and recidivism reduction. Created YOBG.
- **Juvenile Justice Realignment Bill (SB 81).** State legislation passed in 2007. Major reform bill that minimized punishment for non-violent juvenile offenders; emphasis on diversion. Created YOBG to increase local funding.
- **Safe Neighborhoods & Schools Act (Prop 47).** Created grant program for community-based diversion programs
- **Los Angeles County Board of Supervisors** adopted a plan in Nov. 2017 to ramp up juvenile diversion countywide. The school may be able to reach more Young Opportunity Youth and tap into probation diversion funding if new legislation allows early release of incarcerated youth if they live at the school. (Must not be court-ordered)

FUNDING STRATEGIES

- Partner with County agencies including Probation and the new Division of Youth Diversion and Development to access public funding allocations such as JJCPA and YOBG funds.
- Juvenile justice reform is a hot button issue right now, and many private funders are looking to invest in innovative programs. Leverage this momentum and to secure foundation support.

APPENDIX E

In order to develop and support a Transportation School, Metro will have to build its capacity to engage in real-world learning experiences with students. While Metro has employed high school students as interns and worked with K-12 schools for other program, long-term projects that require a deeper level of engagement, will be a new challenge for Metro. From March-May of 2018 Metro partnered with Da Vinci Communications, a high school that uses project-based learning and industry partnerships, to pilot student projects that rely on the engagement of Metro employees. The pilot provided Metro with insights about the challenges and opportunities that will likely arise when implementing industry-connected, project-based learning into the Transportation School's curriculum,

This type of education requires dedicated industry professionals who can help teachers understand the industry and its current challenges. Teachers then take this information and develop real-time learning opportunities for students. For the pilot, Metro staff met with Da Vinci teachers and students and developed projects based on Metro's desire to understand declining bus ridership and how to increase ridership among youth. Together, they developed Projects for 10th and 11th grade students. These projects can serve as models of how Metro can work with teachers to integrate transportation-related content into the classroom.

Da Vinci Communications and Metro's Project-Based Learning Design and Implementation Phases

The following is an overview of what can be expected when working on the design and support of a project with Da Vinci Schools. Metro can use this model as a template for future student project collaborations.

PHASE 1: Project Design

1. Understand Expectations
2. Create Industry/Community Partner Client Brief
3. Leadership Team Jam Session (teachers, partner, etc.)
4. Teachers Create Project Brief Overviews + Project "Critical Friends" with Industry/Community Partner
5. Student Jam Session

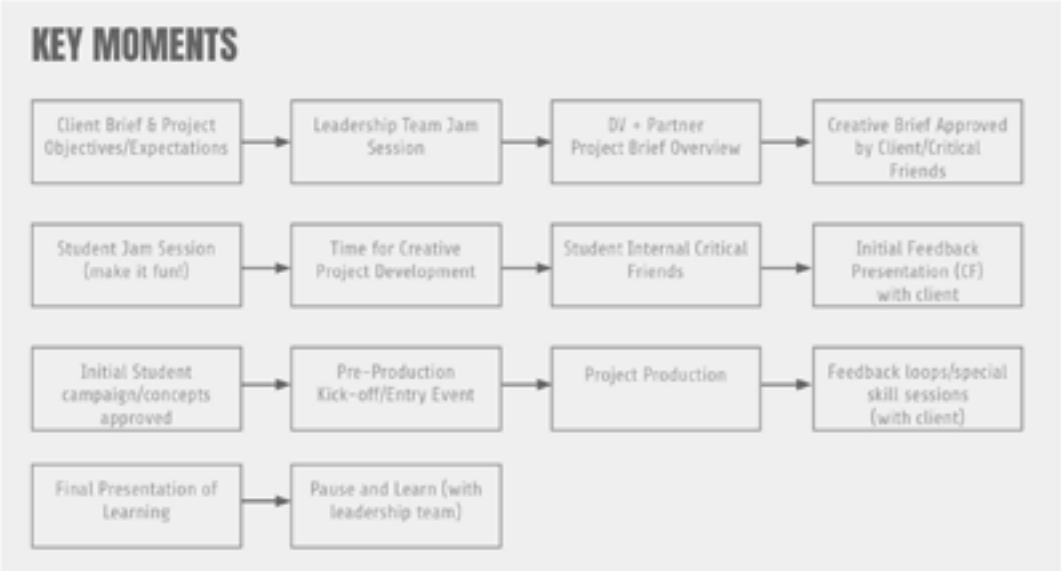
PHASE 2: Project Creation

6. Student Project Production
7. Feedback Loops and Special Skill/Expertise Sessions

PHASE 3: Project Culmination

8. Final Student Presentations of Learning
9. Pause and Learn

Key Milestones in Metro + Da Vinci Project Based Learning Planning and Implementation



STEP 1: UNDERSTAND EXPECTATIONS

For Metro and Da Vinci to better understand the roles and expectations for a school-industry partnership, the following "Expectations Overview" was used to ensure both parties leveraged the appropriate support and capacity.

What Metro Can Expect When Working with Da Vinci on a Project:

Project Planning: 2 Hours *Co-develop a project with a teaching team and improve our curriculum by injecting your professional experience and skills into what students will be learning in class.* • 1 Meeting with design team to co-craft project
Guest Lecture/Skill Delivery: 1 Hour/Potentially Multiple Opportunities *Come share your experiences with our students and teach them professional career skills* • One classroom visit - Share real world experience/teach real world skill ' • This can be done with multiple professionals throughout the project
Project Pitch and Feedback Loop: 1-3 Hours Each *Inspire and guide students to create great real-world work by giving them a challenge in person and then coming back to critique their work mid-way through their process* • 1 pitch meeting + 1 visit midway through the project • Entry event: pitch the project to the students, give them a challenge and explain what you are looking for in their solution • Guest lecture/critique mid-project
Final Evaluation of Student Work: 1-4 Hours *Students present final work to industry professionals. Get creative! This can be held at the industry partner's site and have some creative flair.* • 1 final presentation - critique and evaluate students' final work and products at exhibition event
Total time Commitment: Approximately 8-15 hours for approximately 1-5 employees

STEP 2: CREATE INDUSTRY/COMMUNITY PARTNER CLIENT BRIEF

A client brief succinctly describes the needs of the "client" and the challenges the student project will address. The industry partner typically writes the Client Brief to ensure that the students and teachers clearly understand their goals and the background information that's relevant to the project. The leadership team and students use the Briefs to draft a plan on how to meet those needs.

For the Metro pilot project, Metro's Communications team wrote a brief that explained their needs related to the NexGen Bus Study; they explained Metro's desire to understand declining bus ridership and how to encourage ridership among youth.

STEP 3: LEADERSHIP TEAM JAM SESSION (TEACHERS, INDUSTRY PARTNERS, ETC.)

A jam session is a group of individuals working together to generate ideas. Leadership team Jam sessions include teachers, industry and community partners, and any leaders interested in beginning to imagine what can be created together. Often a few student representatives also join the group.

In March, a group of Da Vinci Communications teachers met with Metro's Communications team to better understand Metro's NexGen Bus Study needs. This meeting informed the overarching plan that students developed for the project.

STEP 4: TEACHERS CREATE PROJECT BRIEF OVERVIEWS AND DEVELOP "CRITICAL FRIENDS" PROTOCOL WITH INDUSTRY PARTNERS

Teachers synthesize what they learned about the client's needs, backwards map a project plan, and craft an overarching timeline. After listening to the needs of the Metro team, the Da Vinci teachers designed a student project plan, list of student deliverables, and calendars. Teachers then presented their draft project plans to Metro to get feedback and approval.

SAMPLE: Deliverables & Skills Assessed Calendar

Deliverables

Name of deliverable	Due date	Essential skill assessed
Focus group agenda	Tuesday, April 17	HoM: Accountability
Focus group report	Monday, April 23	ES 4: Writing
Strategy brief presentation with 3 creative ideas	Friday, April 27	ES 1: Strategic Thinking ES 3: Presentation
Creative wall review	Friday, May 4	ES 2: Education & Persuasion
Draft creative campaign	Friday, May 11	Re-assessment for ES 2
Final presentation	Thursday, May 17	ES 3: Presentation

SAMPLE: Teacher Created Student Project Pitch

Driving questions:

- *How can we reimagine transportation in LA County to reflect changing needs and preferences of riders in the the 21st century?*
- *What are the barriers that youth face in using public transit, and how can we as students use our pathway skills to address those barriers?*
- *How can public transit serve as an educational tool to engage students with the geography and history of their community?*
- *How has technology impacted transportation and how can we use technology to reimagine transportation?*

Project description

Metro has asked the students of Da Vinci Communications to develop and pitch ideas to address declining youth ridership rates on public buses in LA County, and choices/opportunities that have caused a decline in youth ridership. **In groups, you and the other juniors at DVC will apply the skills of your pathway course to identify the barriers that youth face in using public transit, and innovate solutions to connect youth to Metro's services.**

Meanwhile, 10th grade students will develop a survey for youth to gauge ridership habits among the students in the Da Vinci community. The survey is necessary to deepen our understanding of ridership and transportation choices students are making. The 10th grade students will share the results of the survey with the 11th grade pathway teams and Metro to help inform Metro's NextGen survey. They will also serve as assistants to the 11th grade students during Phase 2 of the project.

Entry event: April 13

To kick off the project, you will travel to Metro headquarters in Downtown LA on Friday, April 13. To start the event, Metro Chief Communications Officer Pauletta Tonilas will introduce the problem and requirements to the group, followed by a small-group breakout session in two rooms. In four groups (which will consist of a mix of students from different pathways, along with Metro team members), **you as the Strat Comms team will facilitate a 1.5-hour brainstorming session using the driving questions above**, with the goal of developing ideas for:

- Questions and requirements for the survey that 10th grade students will develop and implement during the first phase of the project
- Project ideas and topics for ONE of the pathway classes: Computer Science, Journalism, Music & Media, or Strategic Communications

At the close of the brainstorming session, the group will re-assemble and representatives from each group will share out their ideas and learnings. DVC faculty will collect this information to share with Metro and students to help inform the project.

5

STEP 5: STUDENT JAM SESSION

A project-based learning student "Jam Session" is designed to support student creativity and agency. In a fun, collaborative setting, students and other stakeholders review the Client Brief and generate diverse solutions to the problem. Project-Based Learning Jam Sessions work best when many stakeholders participate including students, industry professionals, teachers, etc.

In March 2018, sixty Da Vinci students rode the Metro train from Hawthorne to Metro HQ and led a Jam Session with Metro employees that included a thirty-minute brainstorm, small group break outs, and a group design session. Dozens of Metro Communications Department staff participate and Da Vinci teachers attended to support students.

** Da Vinci Students riding the Metro to the student Jam session at Metro HQ*

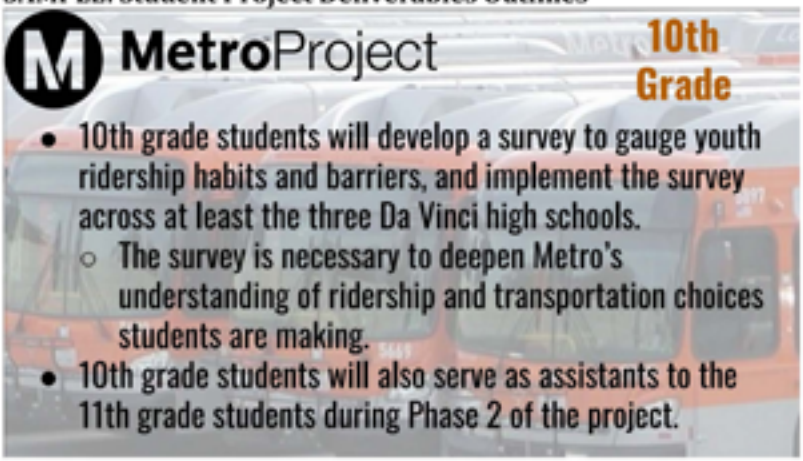
After the session Da Vinci students began working on the following deliverables:

- ✓ Conduct a survey or focus groups to assess youth riders' experience on the Metro
- ✓ Research news articles, feature stories, and op-eds about youth and transit ridership.
- ✓ Create a video that highlights transit from a teen perspective
- ✓ Develop an ad campaign to boost youth ridership
- ✓ Create a social media strategy to encourage youth to ride the bus
- ✓ Develop an interactive web page for young transit riders
- ✓ Create an app that gamifies riding the Metro for young transit riders
- ✓ Develop a marketing strategy

STEP 6: STUDENT PROJECT PRODUCTION

After the Jam session, students take their ideated concepts and backwards map a plan of action. This process involves creating support tools such as Gantt charts, calendars, task lists, group roles, etc. Da Vinci students created intricate project plans and drafted their potential solutions for Metro.

SAMPLE: Student Project Deliverables Outlines



STEP 7: FEEDBACK LOOPS AND SPECIAL SKILL EXPERTISE SESSIONS

There should be multiple touch points for industry/community partners to provide feedback to student groups throughout the process. In addition, whenever possible guest speakers and industry-led design workshops should align to practical skills the students need to craft their deliverables.

Metro employees took part in multiple feedback loops, helping students reflect and refine their projects. The student feedback loop calendar is below.

Project calendar

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
4/9 – **No School** (Professional Development Day)	4/10	4/11	4/12 Jam sesh training and role assignments	4/13 **Kick-off @ Metro 10AM**
4/16 **Phase 1 Begins** Conduct focus groups this week	4/17 **Check focus group agenda with Deepti by the end of the period**	4/18	4/19	4/20
4/23 **Focus group report due (ES4 assessment)** Introduce strategy brief template	4/24	4/25 Strategy brief and possible creative concepts due for peer review	4/26 10th and 11th: NACAC College Fair all day	4/27 **Strategy brief and possible creative concepts presentations in class (ES1 and 3 assessment)**
4/30 **Review from Metro this week @ DVC** 10th graders share collected survey data with pathway teams	5/1 **Phase 2 Begins** Creative wall development in class	5/2	5/3	5/4 **Creative wall review in class (ES2 assessment)**
5/7 Begin developing creative campaign in teams	5/8	5/9	5/10	5/11 **Draft creative campaign due for peer review**
5/14 Develop final presentation	5/15	5/16	5/17 **Pathway teams present to teachers @DVC (ES3 assessment)**	5/18 – **No School** (Professional Development Day)
5/21	5/22 **Pathway final presentation @ Metro**	5/23	5/24	5/25

STEP 8: FINAL STUDENT PRESENTATIONS OF LEARNING

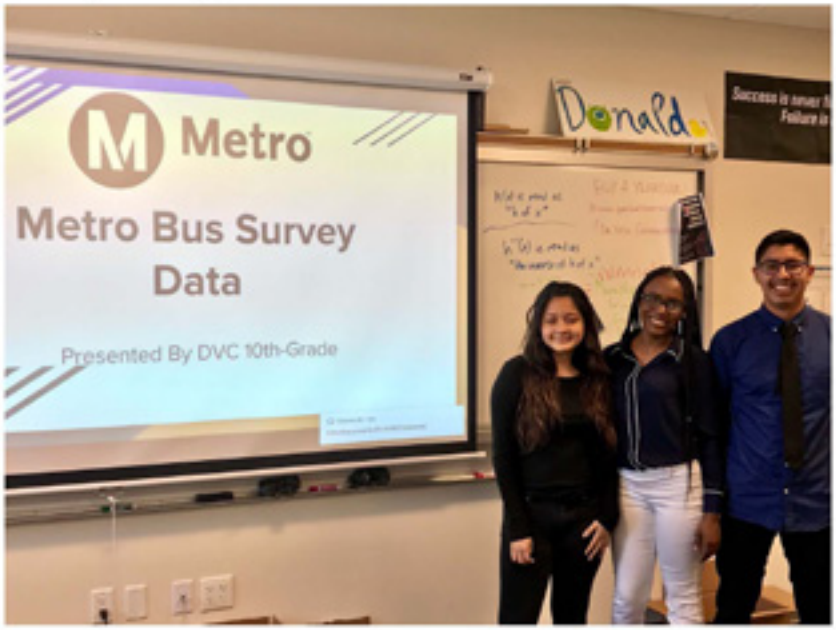
At project conclusion, it is essential that the projects students created have a public forum and audience to whom they can present their final deliverables. These Presentations of Learning (POLs) help students take ownership of their work as they prepare and deliver recommendations in a public setting. In turn, stakeholders benefit by becoming active participants in the student's growth, receiving real insight and solutions to their initial Client Brief, feeling engaged in their workplace, and knowing that their contributions made a positive influence on youth.

One of the student groups' final presentations is below.

- Humans of Metro

STEP 9: PAUSE AND LEARN

After the project, it is important for all stakeholders to reflect on the project and determine what aspects of the process were successful and what aspects of the project should be refined for the future. Metro staff, students, and Da Vinci teachers completed surveys to ensure that key learnings were captured.

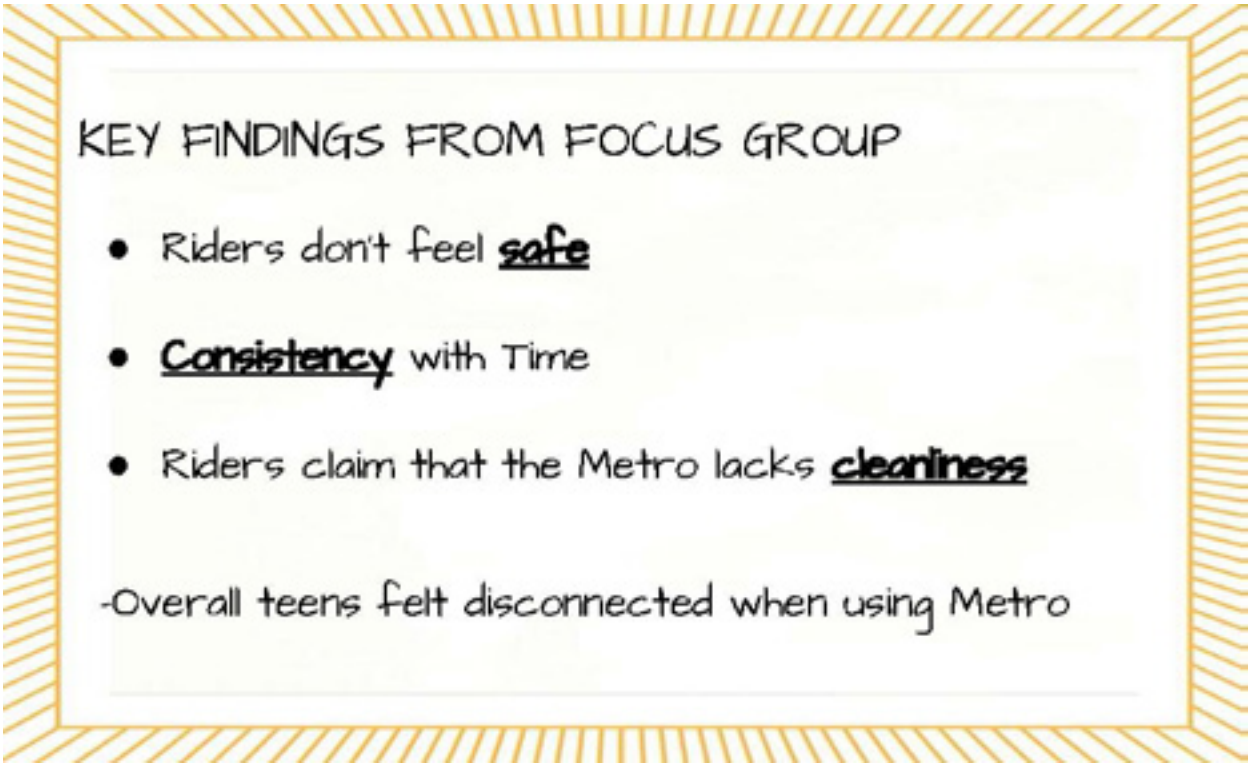


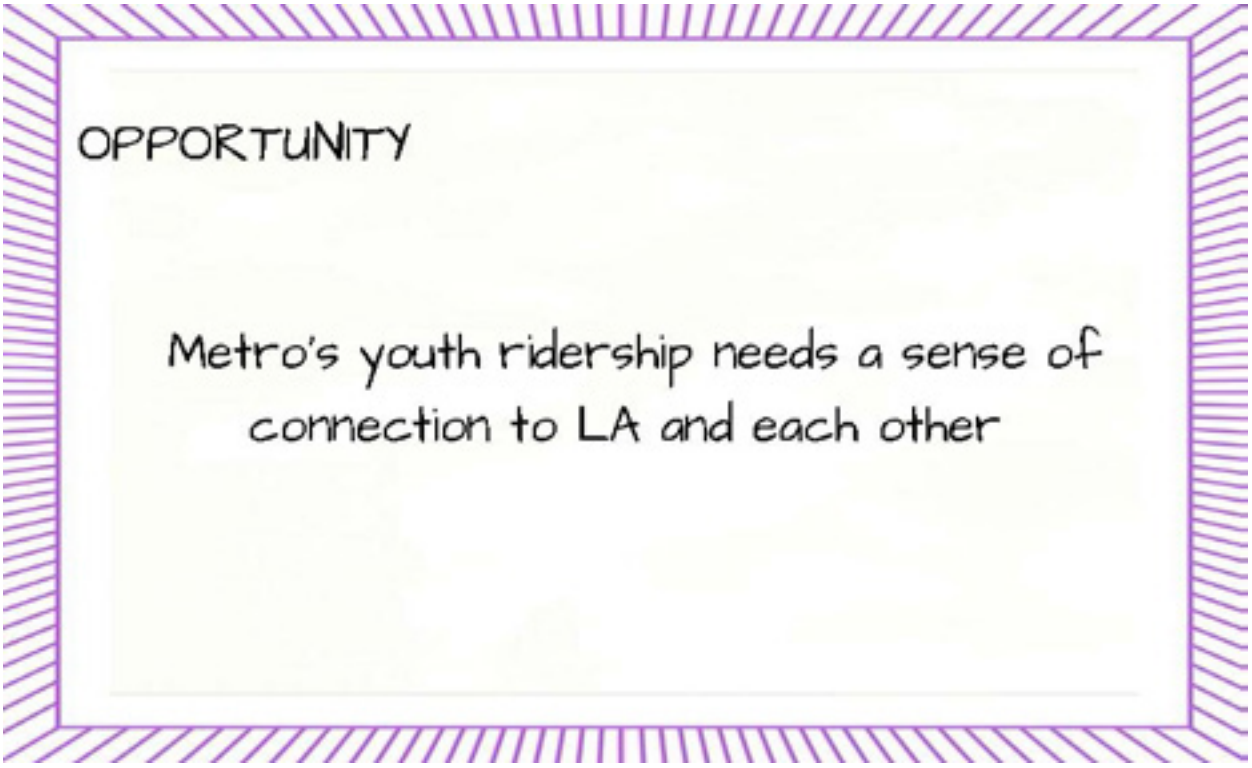
** Da Vinci Students Presenting to Employees at Metro HQ*

APPENDIX E (CONTINUED)

Strategy Brief

By: Hannah Boone, Pearl Gonzalez, and Ronan Mobley


KEY FINDINGS FROM FOCUS GROUP
• Riders don't feel safe
• Consistency with Time
• Riders claim that the Metro lacks cleanliness
-Overall teens felt disconnected when using Metro


OPPORTUNITY
Metro's youth ridership needs a sense of connection to LA and each other

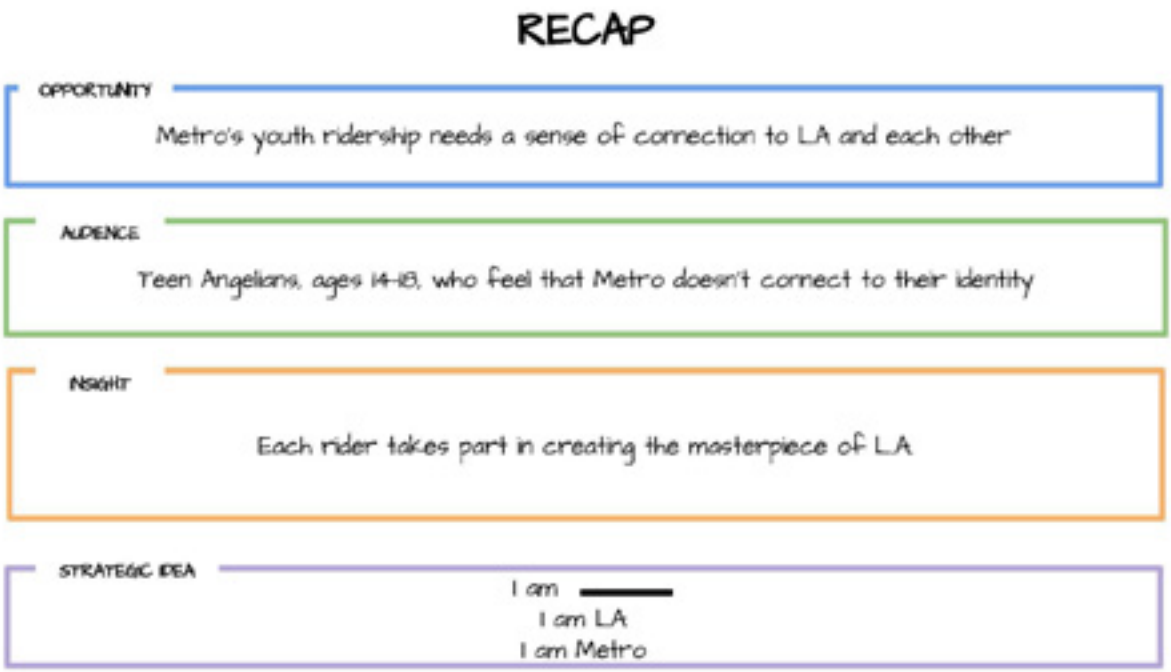
TARGET AUDIENCE

Teens between the age of 14-18, born and raised in L.A. who feel like they're lost in the sea of Metro riders and that Metro does not connect to their identity.

INSIGHT

Each rider is a brushstroke on the canvas of L.A. and with their stories, connected together, they can create a masterpiece.

APPENDIX E (CONTINUED)



Human's of Metro Poster

- Youth of L.A.
- They explain who they are/how they see themselves
- "I am" slogan

The Greet Seat

- Able to meet new people
- Give ice breakers
- Encourages the idea that new friendships can start with Metro
- Local L.A. artists design it

APPENDIX E (CONTINUED)


Thank You

APPENDIX E