



## Where the Rubber Meets the Rail: Recycling Tires to Reduce Vibration

*Image courtesy of CalRecycle.*

The Santa Clara Valley Transportation Authority received a \$300,600 grant from CalRecycle – the State’s champion for waste reduction, recycling and reuse – for the installation of Tire Derived Aggregate (TDA) on the BART Silicon Valley Project.

TDA is a method of sustainable construction in which scrap vehicle tires are transformed into a vibration-reducing material. Approximately 4,200 tons of TDA will be installed beneath the tracks in four locations along the BART Silicon Valley corridor to help reduce vibration from passing BART trains.

TDA is an environmentally-friendly construction material, which provides a permanent second use for recycled tires. A one-foot thick layer of shredded tires will be placed beneath the track foundation, where BART

rails will be installed. This engineering method has a proven track record: in 2005, the material was installed on 3,000 feet of the Vasona light rail extension in the City of Campbell, making VTA the first public agency in the United States to do so. Over the past 10 years the material has reduced vibrations from light rail trains as intended. Using TDA is environmentally-friendly, minimizes noise and vibration and is cost-effective for the taxpayer.



*Image courtesy of CalRecycle.*

 To learn more about Tire Derived Aggregate, watch CalRecycle's video here: <http://bit.ly/1FwFBoC>



Back row: VTA staff Oxo Slayer, Nicole Franklin, Ben Glickstein and Brent Pearce. Front row: VTA staff Rachael Keish and Gail Collins and SSH staff Cassandra Manansala and Jose Mendoza.

## VTA in the Neighborhood

Representatives of BART Silicon Valley are out and about in the neighborhood every day, listening to neighbor's concerns, helping to move the project forward and addressing the needs of the community during construction. A representative from the project may visit your home in order to discuss specific construction activities in your area. These representatives should always have their identification prominently displayed, which will be from VTA (Santa Clara Valley Transportation Authority) or SSH (Skanska/Shimmick/Herzog). If you have any reason to doubt that the visitor is an official project representative, ask us for our identification or call (408) 934-2662 to confirm.



*Installation of the steel canopy above the boarding platform at the Berryessa Station.*

## PROJECT SPOTLIGHT: Berryessa Station Architecture

In spring 2015, VTA completed the construction of the sweeping steel canopy which will shade the future Berryessa BART Station boarding platform. To learn more about this unique architectural element, VTA's Linh Hoang interviewed Claudia Guadagne, president of FMG Architects, who created the station's design.



Watch the interview here: [bit.ly/1P3vQbc](http://bit.ly/1P3vQbc)

"This is a very exciting time for transit," says Guadagne. "The majority of BART stations were constructed almost 50 years ago. Now, the focus has changed to incorporate station designs into the local culture and community." In the case of Berryessa Station, the curved canopy design is inspired by the lines of North San Jose's creeks and hills.



*Berryessa Station architectural canopy.*



## Milpitas Station on the Rise

**A**fter three years of digging and working underground, the Milpitas BART Station has finally started to rise up. The concrete floor of the street level concourse gathering area, where transit riders will enter the station and purchase tickets, has been poured. Commuters travelling along Montague Expressway near the Great Mall will see the installation of steel start to form the roof and walls of the future BART station building.

Construction is underway on various improvements to provide pedestrians, cyclists and transit riders all have easy access to the station. Structural columns have been built making way for the construction of a pedestrian bridge that will provide a convenient and direct connection between the future BART station and VTA's Montague Light Rail Station. The installation of underground utilities is complete and the foundation construction for an indoor bike storage facility is underway. The facility will have 180 secure bike parking spaces inside the building monitored by BikeLink™.

 To see the construction progress at the Milpitas Station visit: [www.vta.org/bart/camviews](http://www.vta.org/bart/camviews).



*Conceptual rendering of the Milpitas BART Station featuring a pedestrian bridge to the Montague Light Rail Station.*



*Structural columns for the future pedestrian bridge between the Milpitas BART Station and the Montague Light Rail Station under construction.*



*Milpitas Station steel structure rising from the ground (April 2015).*

## Legend

-  BART Tracks
-  VTA Light Rail
-  Intersection Work
-  Future Station
-  Alternative Routes

## Dixon Landing Road

Expect reduced lanes, multiple traffic shifts and periodic weekend closures through fall 2015 to support trench and bridge construction, and utility relocations. Kato Rd. is the designated detour route during road closures.

Espere reducción de carriles, múltiples cambios en el tráfico y cierres periódicos los fines de semana hasta finales del otoño de 2015 para asistir las obras de construcción de las zanjas y el puente, y para la reubicación de servicios públicos. Kato Rd. es la ruta de desviación designada durante el cierre de la calle.

Dự kiến giảm bớt làn đường, thay đổi nhiều về giao thông và đóng đường định kỳ đến mùa thu 2015 để hỗ trợ việc làm mương và xây cầu và dịch chuyển các công trình điện nước. Đường Kato là tuyến đường vòng được chỉ định trong thời gian đóng đường lộ.

至 2015 年秋末為止，預計進行車道縮減、多處車輛改道、週末定期封路，以配合地下道和橋樑工程及公用事業設施遷移作業。Kato Rd. 是封路期間的專用便道。

## Trade Zone Boulevard

Periodic lane reductions and traffic shifts will occur through fall 2015 to relocate utilities and construct a street-level bridge and trench for BART to pass underneath the roadway.

Habrà reducciones periódicas de los carriles y cambios en el flujo del tránsito hasta finales del otoño de 2015 con el fin de reubicar los servicios públicos, construir un puente a nivel de la calle y una zanja para que BART pueda pasar por debajo de la calzada.

Việc giảm thiểu làn đường định kỳ và chuyển lưu lượng giao thông sẽ xảy ra suốt mùa Thu 2015 để dịch chuyển các công trình điện nước và xây một cây cầu ngang mặt đường và đào mương cho hệ thống BART đi bên dưới lòng đường

至 2015 年秋末為止，將定期進行車道縮減和交通改道，以遷移市政公用設施、建造街道橋和地下道，使 BART 在車道下通過。

## Lundy Avenue and Sierra Road

The intersection of Sierra Rd. and Lundy Ave. is temporarily closed to public access (automobiles and pedestrians) until fall 2015. Please follow official detour on Flickinger Ave. and additional detour signage in the area. Starting in the spring, some work activities will be extended to the hours between 7 p.m. and 10 p.m. with noise and lighting being monitored closely.

La intersección de Sierra Rd. y Lundy Ave. estará cerrada temporalmente al acceso público (automóviles y peatones) hasta el otoño de 2015. Por favor siga la desviación oficial en Flickinger Ave., así como los señalamientos de desviación adicionales colocados en el área. A partir de la primavera, algunos horarios de trabajo se extenderán entre las 7 p.m. y las 10 p.m., y tanto el ruido como la iluminación serán monitoreados cuidadosamente.

Giao lộ của đường Sierra và Đại lộ Lundy tạm đóng đối với các phương tiện lưu thông công cộng (xe hơi và khách bộ hành) cho đến mùa Thu 2015. Xin vui lòng đi theo đường vòng chính thức trên Đại lộ Flickinger và biển báo đường vòng bổ sung trong khu vực. Kể từ mùa Xuân, một số hoạt động xây dựng sẽ kéo dài từ 7 giờ tối đến 10 giờ tối. Độ ồn ào và ánh sáng sẽ được theo dõi chặt chẽ.

在 2015 年秋末以前，Lundy Avenue 與 Sierra Road 十字路口將暫時關閉（汽車及行人禁止通過）。請改道行駛至 Flickinger Ave.，並遵守施工區內其他改道標示的規定。從春季開始，一些施工作業將延長至晚上 7 點至 10 點，期間將對噪音和照明進行嚴格監測。



## Mission Boulevard

The newly widened Mission Blvd., from two to three lanes in both directions between I-880 and Warm Springs Blvd. Mission Blvd. now features newly constructed on-and-off ramps from Kato Rd.

Mission Blvd. fue recientemente ampliado de dos a tres carriles en ambas direcciones entre la carretera I-880 y Warm Springs Blvd. Mission Blvd. ofrece ahora nuevas rampas de entrada y salida en Kato Rd.

Đại lộ Mission mới được mở rộng, từ hai lên ba làn đường ở cả hai hướng giữa Xa lộ I-880 và Đại lộ Warm Springs. Đại lộ Mission giờ đây nêu bật những đường dốc mới ra vào đường Kato.

新拓寬的 Mission Blvd. 現在新建有從 Kato Rd. 上下高速公路的坡道。這項新拓寬道路工程是將位於 I-880 和 Warm Springs Blvd 之間的雙向路段從二線道改為三線道。



## Capitol Avenue

Traffic will be shifted in stages and lane capacities reduced through summer 2015 in order to relocate utilities, build a street-level bridge and trench for BART to pass underneath the roadway.

Se cambiará el flujo del tránsito por etapas y se reducirá la capacidad de carriles hasta finales del verano de 2015 con el fin de reubicar los servicios públicos, construir un puente a nivel de la calle y una zanja para que BART pueda pasar por debajo de la calzada.

Giao thông sẽ được chuyển theo giai đoạn và lưu lượng làn xe giảm thiểu suốt mùa hè 2015 nhằm dịch chuyển các công trình điện nước, xây một cây cầu ngang mặt đường và đào mương cho Hệ Thống BART đi bên dưới lòng đường.

至 2015 年夏末為止，將分段轉移交通量並減少車道，以遷移市政公用設施，建造街道橋和地下道，使 BART 在車道下通過。

## Berryessa Road

Construction of the elevated bridge structure that will span across Berryessa Rd. is underway. Expect lane reductions and periodic night time road closures during fall 2015.

La construcción del puente elevado, el cual cruzará sobre Berryessa Road, está en progreso. Anticipe una reducción de carriles y cierres nocturnos periódicos de la calle durante el otoño de 2015.

Đang xây cầu trên cao bắc qua đường Berryessa Road. Sẽ giảm bớt làn và đóng đường định kỳ vào ban đêm suốt mùa Thu 2015.

跨越 Berryessa Road 的高架橋工程目前正在施工中。在 2015 年秋季期間，該路段將進行車道縮減，並在夜間定期封路。





Image courtesy of Skycatch, Inc.

## Innovation in Construction

Since VTA's Berryessa Extension Project covers a large geographic area, the project team has turned to new technology to monitor construction and to improve productivity.

VTA's contractor has hired a Bay Area startup to fly unmanned aerial vehicles (UAVs) over the entire project. The UAVs, or drones, take high-resolution photographs of the project and provide real-time data to the project team. The progress photos give the contractor a comprehensive view of the project that allows them to avoid potential

issues. Because the drones fly over the project on a regular basis, the contractor is able to track the use of materials and monitor construction progress without leaving the office. The use of drone technology improves jobsite safety, product quality, budget and schedule management, resulting in more efficient construction practices.

## Are We There Yet?

Did you ever wonder why it takes so long to build an extension of the regional BART system? VTA started construction on the Berryessa Extension in April 2012, and the new stations are scheduled to open in fall 2017. So, why does it take five and a half years to build 10 miles of the system and two new BART stations? The simple answer is scale.

VTA's BART Silicon Valley Berryessa Extension Project extends BART service 10-miles into Santa Clara County. The amount of infrastructure required to build the largest capital project in the South Bay's history is staggering.

### What Needs to be Done:

Consider these facts about what is required to construct the Berryessa Extension:

- Construct bridges and two and half miles of trenches for BART trains to pass under or over 13 major intersections (grade separations)
- One mile of elevated guideway
- 20 miles of tracks

- Excavate 700,000 cubic yards of dirt; equal to 58,000 dump trucks
- Pour 280,000 cubic yards of concrete; equal to 28,000 concrete trucks
- 130 million pounds of ballast or rock to support the BART tracks

### Where We Stand:



88%



67%

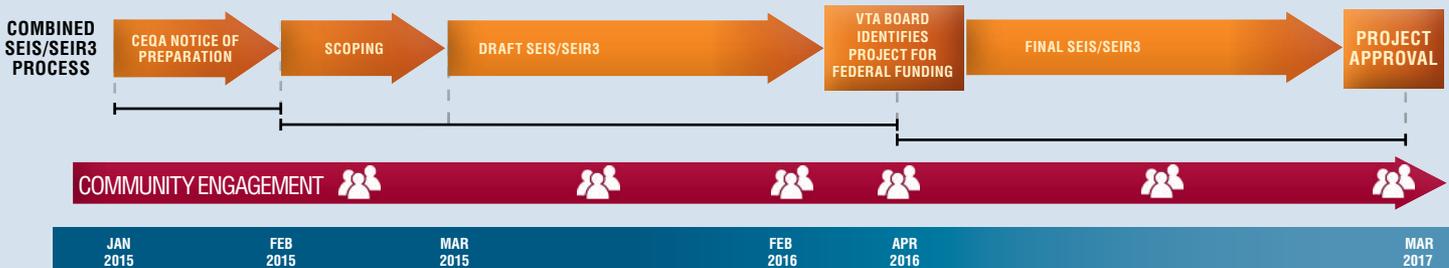


## VTA's BART Phase II Kicks Off

VTA and the Federal Transit Administration have begun the environmental study for VTA's BART Silicon Valley Phase II Extension Project. In February 2015, VTA held three scoping meetings to identify the significant issues to be addressed for the proposed six-mile, four-station extension of the BART system from the Berryessa Station in San Jose (currently under construction) to the City of Santa Clara. VTA accepted scoping comments through March 2, 2015, which focused primarily on station access and connectivity (rail transfers, bicycle and pedestrian connections to the future BART stations and transportation options to and from Mineta San Jose International Airport). Comments received during the scoping process will be used to direct a comprehensive environmental analyses and technical studies as needed.

VTA is now analyzing Project impacts, mitigation measures, and alternatives (4 station or no-build). During the spring/summer of 2015, VTA will conduct several community meetings on a range of topics including economic and community benefits, station features, consistency with local station area land use plans, transportation connectivity, construction methods and innovative financial strategies.

To learn more about Phase II visit us at: [www.vta.org/bart/environmental-phasell](http://www.vta.org/bart/environmental-phasell).





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# BART Silicon Valley – Community Update – Spring 2015

PROGRAM OVERVIEW		
	Phase I Berryessa Extension	Phase II Santa Clara Extension
<b>Service Area</b>	Extends the BART System 10 miles from the future Warm Springs Station to San Jose	Extends the BART System 6 miles from the future Berryessa Station to Santa Clara
<b>Project Cost</b>	\$2.3 Billion	\$4.7 Billion
<b>Stations</b>	<ul style="list-style-type: none"> <li>Milpitas, near the Great Mall</li> <li>Berryessa, near San Jose Flea Market</li> </ul>	<ul style="list-style-type: none"> <li>Alum Rock, in northeast San Jose</li> <li>Downtown San Jose, near City Hall</li> <li>Diridon, near the Diridon Caltrain Station in San Jose</li> <li>Santa Clara, near Santa Clara University</li> </ul>
<b>Planned Passenger Service</b>	2017	2025



## Learn More

VTA provides notification of construction activities and traffic updates through the mail and website updates. If you would like to be added to the project mailing list to receive updates or have questions, comments or concerns, please contact VTA Community Outreach at the phone number or email address provided below.

## Obtenga más información

VTA da aviso de las actividades de las obras y de cambios en el tráfico por medio de informes enviados por correo y publicados en el sitio Web. Si le gustaría ser agregado(a) a la lista de correo para recibir avisos, o si tiene alguna pregunta, comentario o inquietud, favor de contactar al programa de extensión a la comunidad, Community Outreach, de VTA al teléfono o al correo electrónico proporcionado a continuación.

## Tim Hiểu Thêm

VTA sẽ thông báo về các hoạt động xây cất và thông tin cập nhật về giao thông qua thư gửi và cập nhật trên trang mạng. Nếu quý vị muốn được bổ sung vào danh sách thư tín để nhận các thông tin cập nhật hoặc có thắc mắc, ý kiến nhận xét hoặc quan tâm, xin vui lòng liên lạc Ban Tiếp Ngoại Cộng Đồng VTA theo số điện thoại hoặc điện thư ghi dưới đây.

## 進一步了解情

VTA 將透過郵件及網站提供工程通知及最新交通資訊。若想加入項目郵寄名單以獲得最新資訊，或您有問題、意見或疑慮，請使用以下電話號碼或電郵地址聯絡 VTA 社區外展部。

Individuals who require language translation, American Sign Language, or documents in accessible formats are requested to contact VTA Community Outreach at (408) 321-7575 / TTY (408) 321-2330.